Form 3160-3

SUBMIT IN TR

(July 1992)		TED STATES T OF THE INTER	(Other instru reverse s		OMB NO. 10 Expires: Februar	04-0136 ry 28, 1995
		LAND MANAGEMEN			5. LEASE DESIGNATION	
					14-20-H62-	
	ICATION FOR P	ERMIT TO DRIL	L OR DEEPEN			
la. TYPE OF WORK	ILL 🕅	DEEPEN 🗆			UTE INDIAN 7. UNIT AGREEMENT NA	
b. TYPE OF WELL	· La	DEEPEN []				_
	VELL OTHER		INGLE MULTIF	PLE	8. FARM OR LIBASE NAME, WELL	L NO.
2. NAME OF OPERATOR					UTE TRIBAL	
	OPERATING CON	IPANY, INC.			9. AF WELL, NO.	····
8. ADDRESS AND TELEPHONE NO.	,,		· · · · · · · · · · · · · · · · · · ·		#16-07	
P.O. BOX 60	7, ROOSEVELT,	UT 84066			10. FIELD AND POOL, OF	WILDCAT
At surtace		in accordance with any i	State requirements.*)		ANTELOPE CI	
2091 At proposed prod. 20	FNL & 2094'	FEL SW/NE	MEIDEN		11. SEC., T., B., M., OR B AND SURVEY OR ARI	
14. DISTANCE IN MILES	AND DIRECTION FROM NEA	REST TOWN OR POST OFFIC			Sec. 16, T	•
	SOUTHWEST OF		•		DUCHESNE	UTAH
15. DISTANCE FROM PROP	OSED*		O. OF ACRES IN LEASE	17. NO. O	F ACRES ASSIGNED	UIAN
LOCATION TO NEARES PROPERTY OR LEASE	LINE, FT. 2091'	1	40	TO TH	40	
(Also to nearest drl 18. DISTANCE FROM PRO	POSED LOCATION*		KOPOSED DEPTH	20. ROTAL	RY OR CABLE TOOLS	
TO NEAREST WELL, I OR APPLIED FOR, ON TE	ORILLING, COMPLETED, HS LEASE, FT.	6	154'	ROTA	ARY	
21. ELEVATIONS (Show wh	ether DF, RT, GR, etc.)				22. APPROX. DATE WOR	K WILL START*
6193.9'GRAD	ED GROUND				MARCH, 199	7
23.	, , , ,	PROPOSED CASING AN	D CEMENTING PROGRA	M		
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	1	QUANTITY OF CEMEN	r
12 1/4	8 5/8	24.0#	250'	135 s:	x class "G"	+ 2% CaCl ₂
7 7/8	5 1/2	15.5#	6154'		#/sx cellof	······································
				1	POZMIX + 2%	
	•	Į.	I		TO 400' ABOV	
					TEREST (+ 10)	-
		- VEIDENT	1 8 1		CEMENT (11 1 O 200' ABOVE	_
		CONFIDENT	IML		ESH WATER IN	
		2014110-2.			CESS).	121(11120 (
		PANY, INC. WI		SIGNAT	•	
		OHDER DO	# DO 4550	•		
Bureau		l, Gas, and M Fairs, Fort D nesne, Utah			ECEIV MAR 1 1 199	
		n 1 - 7 1 5 5		177	7[
IN ABOVE SPACE DESCRIE deepen directionally, give per 24.	EPRIMASEI PROGRAM-16 inent dataka sebsuatan beatio	resposa is to beingin, give date of and measured and true vertice	a on present productive zone al depths. Give blowout preve	and proposed	ne productive Con 3 i pro	posat is to drill or
SIGNED	il with	TITLE AG	ENT FOR PETRO	OGLYPH		97
(This space for Fede	eral or State office use)					

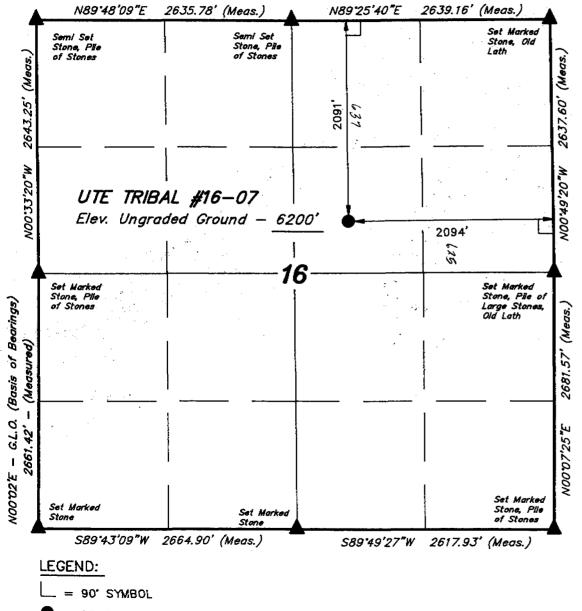
Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. CONDITIONS OF APPROVAL, IP AN

APPROVAL DATE _

43-013-31854

'See Instructions On Reverse Side

T5S, R3W, U.S.B.&M.



= PROPOSED WELL HEAD.

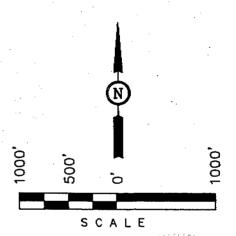
= SECTION CORNERS LOCATED.

PETROGLYPH OPERATING CO., INC.

Well Location, UTE TRIBAL #16-07, located as shown in the SW 1/4 NE 1/4 of Section 16, T5S, R3W, U.S.B.&M. Duchesne County, Utah.

BASIS OF ELEVATION

BRASS CAP SET IN CONCRETE BY SUNRISE ENGINEERING LOCATED IN THE SE 1/4 OF SECTION 16, T5S, R3W, U.S.B.&M. SAID ELEVATION IS MARKED AS BEING 6281.9 FEET.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF

REGISTERED LAND SURVEYOR REGISTRATION NO. 161319

Uintah Engineering & Land Surveying 85 SOUTH 200 EAST - VERNAL, UTAH 84078

(801) 789-1017

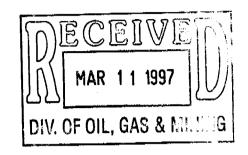
SCALE 1" = 1000'		DATE SURVEYED: 01-10-97	DATE DRAWN: 01-24-97
J.F. C.K.	D.R.B.	REFERENCES G.L.O. PL	_AT
WEATHER		FILE	
COLD		PETROGLYPH OP	ERATING CO., INC.

Petroglyph Operating Co., Inc. P.O. Box 1839

Hutchinson, KS 67504-1839

March 4, 1997

Utah Division of Oil, Gas, & Mining Attn: Mr. Frank Matthews, Petroleum Engineer 1594 West North Temple Box 145801 Salt Lake City, UT 84114-5801



RE: APPLICATION FOR PERMIT TO DRILL **UTE TRIBAL #16-07** SW/NE SEC. 16, T5S, R3W DUCHESNE COUNTY, UTAH LEASE NO. BIA 14-20-H62-3511 **UTE TRIBAL LANDS**

Dear Mr. Matthews:

Enclosed please find a copy of the Application for Permit to Drill and associated attachments for the referenced well.

Please address further communication regarding this matter (including approval) to:

Ed Trotter P.O. Box 1910 Vernal, UT 84078 Phone # (801) 789-4120 Fax # (801) 789-1420

Sincerely.

Ed Trotter Agent

Petroglyph Operating Co., Inc.

Attachments

/EHT/dmt

EIGHT POINT PLAN

UTE TRIBAL #16-07 SW/NE SEC. 16, T5S R3W DUCHESNE COUNTY, UTAH

1. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:

FORMATIONS	DEPTH	SUBSEA
Mahogany Shale	2963	3219
"B" Marker	4074	2108
"X" Marker	4548	1634
Douglas Creek	4698	1484
"B" Limestone	5083	1099
B/Castle Peak Limestone	5647	535
Basal Carbonate Limestone	6044	138
Total Depth	6154	28

Anticipated BHP

2000 psi

2. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS FORMATIONS:

<u>Substance</u>	Formation	<u>Depth</u>	Subsea
Oil/Gas	Douglas Creek	4698	1484
Oil/Gas	B/Castle Peak	5647	535
Other mineral zones	N/A		

3. PRESSURE CONTROL EQUIPMENT: BOP Schematic Diagram attached.

4. CASING PROGRAM:

MINIMUM SAFETY FACTOR

HOLE SIZE	INTERVAL	LENGTH	SIZE	WEIGHT	GRADE	<u>COLLAPS</u>	E BURST T	ENSILE
12 1/4	0' - 250'	250'	8 5/8	24.0 #	J-55	1370 PSI	2950 PSI	263,000#
7 7/8	0' - 6154'	6154'	5 1/2	15.5 #	M-50	3650 PSI	4550 PSI	186,000#

All casing will be new or inspected.

EIGHT POINT PLAN

UTE TRIBAL #16-07 SW/NE SEC. 16, T5S R3W DUCHESNE COUNTY, UTAH

5. MUD PROGRAM

INTERVAL	MUD TYPE
0' - 250'	Air
250' - 4000'	Air/Mist & Aerated Water
4000' - TD	Air/3% KCL water or KCL substitute
TD	Gel/polyacrylamide polymer w/5-10% LCM

Sufficient mud inventory will be maintained on location during drilling to handle any adverse conditions that may arise.

6. **VARIANCE REQUESTS:**

- A. Petroglyph Operating Co., Inc. requests a variance to regulations requiring a straight run blooie line.
- B. Petroglyph Operating Co., Inc. requests a variance to regulations requiring an automatic ignitor or continuous pilot light on the blooie line.

7. **EVALUATION PROGRAM**:

Logs:	Mud Logging	T.D. to base of surface csg.
	Compensated Density-Compensated Neutron Log	T.D. to base of surface csg.
	Dual Laterolog - Micro-SFL	T.D. to base of surface csg.
	Numar (Magnetic Resonance Imaging Log)	@ Geologists discretion

Cores: None Programmed DST': None Programmed

Completion: To be submitted at a later date.

8. ABNORMAL CONDITIONS:

None anticipated.

EIGHT POINT PLAN

UTE TRIBAL #16-07 SW/NE SEC. 16, T5S R3W DUCHESNE COUNTY, UTAH

9. STANDARD REQUIRED EQUIPMENT:

- A. Choke Manifold
- B. Kelly Cock
- C. Stabbing Valve
- D. Visual Mud Monitoring

10. HAZARDOUS CHEMICALS:

No chemicals subject to reporting under SARA title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in associaton with the drilling of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in associaton with the drilling of this well.

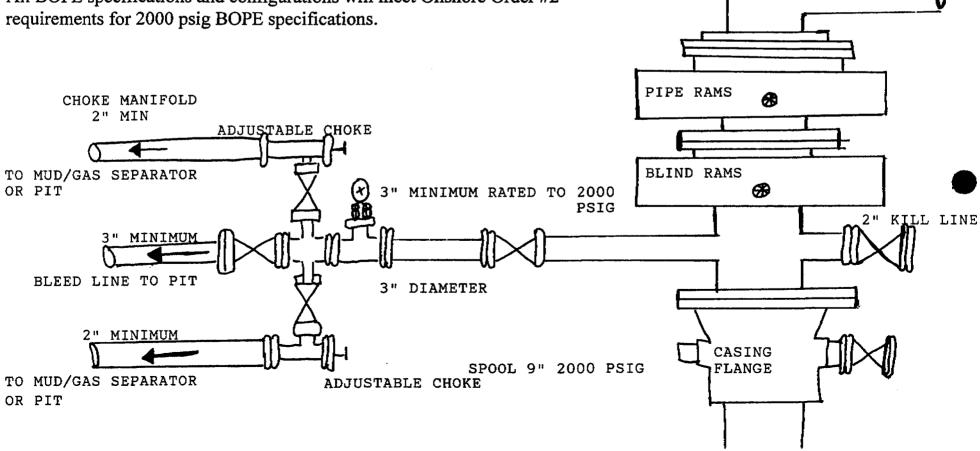
(Attachment: BOP Schematic Diagram)

2000 PSIG DIAGRAM

BOTH RAMS ARE 2000 PSIG RATED. CASING FLANGE IS 9" 2000 PSIG RATED. BOPE 9" 2000 PSIG

TESTING PROCEDURE:

- 1. BOPE 's will be tested with a professional tester to conform to Onshore Order #2 with retest every 14 days.
- 2. Blind rams will be tested to rated working pressure, 2000 psig
- 3. Casing will be tested to 0.22 psi/ft. or 1500 psig. Not to exceed 70% of burst strength, whichever is greater.
- 4. All lines subject to well pressure will be pressure tested to the same pressure as blind & pipe rams.
- 5. All BOPE specifications and configurations will meet Onshore Order #2 requirements for 2000 psig BOPE specifications.



ROTATING

FLOW LINE

HEAD

CONDITIONS OF APPROVAL FOR THE SURFACE USE PROGRAM OF THE APPLICATION FOR PERMIT TO DRILL

Company/Operator: Petroglyph Operating Co., Inc.

Well Name & Number: <u>Ute Tribal #16-07</u> Lease Number: BIA 14-20-H62-3511

Location: 2091' FNL & 2094' FEL SW/NE, Sec. 16, T5S R3W

U.S.B.&M., Duchesne County, Utah

Surface Ownership: Ute Indian Tribe

NOTIFICATION REQUIREMENTS

Location Construction - forty-eight (48) hours prior to construction of location and access roads.

Location Completion - prior to moving on the drilling rig.

Spud Notice - at least twenty-four (2

- at least twenty-four (24) hours prior to spudding the

well.

Casing String and

Cementing - twenty-four (24) hours prior to running casing and

cementing all casing strings.

BOP and related

Equipment Tests - twenty-four (24) hours prior to running casing and

tests.

First Production

Notice - within five (5) business days after new well begins

or production resumes after well has been off production for more than ninety (90) days.

For more specific details on notification requirements, please check the Conditions of Approval for Notice To Drill and Surface Use Program.

1

THIRTEEN POINT SURFACE USE PROGRAM

1. EXISTING ROADS

- A. See attached Wellsite Plats showing directional reference stakes on location, and attached TOPO Map "B" showing access to location from existing road.
- B. The proposed well site is located approximately 20.25 miles southwest of Myton, Utah See attached TOPO Map "A".
- C. Refer to attached Topographic Map "A" showing labeled access route to location.
- D. Existing roads will be maintained and repaired as necessary. No off lease Right-of-Way will be required.

2. PLANNED ACCESS ROAD

- A. The access road will be approximately 0.25 miles in length. See attached TOPO Map "B".
- B. The access road has a 30 foot ROW w/18 foot running surface.
- C. Maximum grade on access road will be 8%
- D. No turnouts will be required.
- E. Road drainage crossings shall be of the typical dry creek drainage crossing type.
- F. No culverts, bridges or major cuts & fills will be required.
- G. The access road will be dirt surface.
- H. No gates, cattleguards or fences will be required or encountered.

New or reconstructed roads will be centerlined - flagged at time of location staking.

All travel will be confined to existing access road Right-of-Way. Access roads and surface disturbing activities will conform to standards outlined in the Bureau of Land Management and Forest Service Publication: Surface Operating Standards For Oil & Gas Exploration and Development, (1989).

The road shall be upgraded to meet the standards of the anticipated traffic flow and all-weather road requirements. Upgrading shall include ditching, drainage, graveling, crowning, and capping the

roadbed as necessary to provide a well-constructed safe road. Prior to upgrading, the road shall be cleared of any snow cover and allowed to dry completely. Traveling off the 30 foot Right-of- Way will not be allowed.

Road drainage crossings shall be of the typical dry creek drainage crossing type. Crossings shall be designed so they will not cause siltation or accumulation of debris in the drainage crossings nor shall the drainages be blocked by the roadbed. Erosion of drainage ditches by run off water shall be prevented by diverting water off at frequent intervals by means of cutouts. Upgrading shall not be allowed during muddy conditions. Should mud holes develop, they shall be filled in and detours around them avoided.

As operator, Petroglyph Operating Co., Inc. shall be responsible for all maintenance on cattleguards, or gates associated with this oil and/or gas operation.

3. LOCATION OF EXISTING WELLS WITHIN A ONE MILE RADIUS OF PROPOSED WELL LOCATION

- A. Water wells None
- B. Abandoned wells 1*
- C. Temporarily abandoned wells None.
- D. Disposal wells None.
- E. Drilling wells None.
- F. Producing wells 5*
- G. Shut in wells None
- H. Injection wells None

 (*See attached TOPO map "C" for location)

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

A. ON WELL PAD

- 1. Tank batteries None
- 2. Production facilities-To be submitted later
- 3. Oil gathering lines None

- 4. Gas gathering lines-None
- 5. Injection lines None
- 6. Disposal lines None
- 7. Surface pits None

B. OFF WELL PAD

- 1. Proposed location of attendant off pad flowlines shall be flagged prior to archaeological clearance.
- 2. A 4 1/2" OD steel above ground production pipeline will be laid approximately 1200' from proposed location to a point in the NE/SW of Section 16, T5S, R3W, where it will tie into Petroglyph Operating Co., Inc.'s existing pipeline to the Ute Tribal #16-06. Proposed pipeline crosses Ute Tribe lands, thus a Right-of-Way grant will be required. See attached TOPO Map D showing pipeline route.
- 3. Proposed pipeline will be a 4 1/2" OD steel, welded line laid on the surface.
- 4. Protective measures and devices for livestock and wildlife will be taken and/or installed where required.

If storage facilities/tank batteries are constructed on this lease, the facility/battery or the well pad shall be surrounded by a containment dike of sufficient capacity to contain, at a minimum, the entire contents of the largest tank within the facility/battery, unless more stringent protective requirements are deemed necessary by the authorized officer.

The production facilities will be placed on the Ute Tribal #16-06 location.

All permanent (on site for six months or longer) structures constructed or installed (including pumping units) will be painted a flat, non-reflective, earthtone color to match one of the standard environmental colors, as determined by the Rocky Mountain Five State Interagency Committee. All facilities required will be painted within 6 months of installation. Facilities required to comply with O.S.H.A.

(Occupational Safety and Health Act) will be excluded. The required paint color is Desert Brown.

5. LOCATION & TYPE OF WATER SUPPLY

- A. Water supply will be from Target Trucking's Roosevelt Brine Storage and/or Target's water source in SE 1/4, Sec. 1, T 4S, R 5W Duchesne County, Utah (State water right #43-10152). All water will come from a non-depletable source.
- B. Water will be hauled by Target Trucking.
- C. No water well will be drilled on lease.

6. SOURCE OF CONSTRUCTION MATERIAL

- A. All construction material for this location and access road will be of native borrow and soil accumulated during the construction of location.
- B. All construction material will come from Ute Tribal Land.
- C. No mineral materials will be required.

7. METHODS OF HANDLING WASTE DISPOSAL

A. METHODS AND LOCATION

- 1. Cuttings will be confined in the reserve pit.
- 2. A portable toilet will be provided for human waste during the drilling and completion of the well. Disposal will be at the Vernal sewage disposal plant.
- 3. Burning will not be allowed. Trash and other waste material will be contained in a wire mesh cage and disposed of at an approved waste disposal facility.
- 4. Produced waste water will be confined to a lined pit or storage tank for a period not to exceed 90 days after initial production. During the 90 day period, an application for approval of a permanent disposal method and location, together with the required water analysis, will be submitted for the AO's approval.

- 5. All chemicals will be disposed of at an authorized disposal site. Drip pans and absorbent pads will be used on drilling rig to avoid leakage of oil to pit.
- B. Water from drilling fluids and recovered during testing operations will be disposed of by either evaporating in reserve pit or be removed and disposed of at an authorized disposal site.
 Introduction of well bore hydrocarbons to reserve pit will be avoided by flaring them off in flare pit at time of recovery.

Burning of trash will not be allowed. All trash must be contained in a trash cage and hauled away to an approved disposal site at the completion of the drilling activities.

On BIA administered land:

All reserve pits will be lined with either native clay, commercial bentonite or plastic sufficient to prevent seepage. (If a plastic nylon reinforced liner is used, it shall be torn and perforated after the pit dries and before backfilling of the reserve pit).

A 12 mill liner shall be installed in the reserve pit.

__To protect the environment: If the reserve pit is lined the operator will provide the BIA with a chemical analysis of the fluids in that pit no later than 90 days after the well completion to determine the method for final reclamation of the reserve pit. If the elemental concentrations shown by the chemical analysis exceeds the requirements described by part II, Standards of Quality for Waters of the State, Wastewater Disposal Regulations, State of Utah Division of Health, the contents and liner will be removed and disposed of at an authorized disposal site.

- ___To protect the environment (without a chemical analysis) reserve pits will be constructed so as not to leak, break, or allow discharge of liquids.
- __Storage tanks will be used if drill sites are located on tribal

irrigable land, flood plains, or on lands under crop production. After first production, produced waste water will be confined to a lined pit or storage tank for a period not to exceed ninety (90) days. During the 90 day period, in accordance with NTL-2B, an application for approval of a permanent disposal method and location, along with required water analysis, shall be submitted for the AO's approval. Failure to file an application within the time allowed will be considered an incident of noncompliance.

8. ANCILLARY FACILITIES

A. No airstrips or camps are planned for this well.

9. WELL SITE LAYOUT

- A. Refer to attached well site plat for related topography cuts and fills & cross sections.
- B. Refer to attached well site plat for rig layout and soil material stockpile location as approved on On-site.
- C. Refer to attached well site plat for rig orientation parking areas, and access road.

The reserve pit will be located on the Northwest side of the location.

The flare pit will be located downwind of the prevailing wind direction on the Northwest side of the location, a minimum of 100 feet from the well head and 30 feet from the reserve pit fence.

The stockpiled topsoil will be stored on the Southwest corner.

Access to the well pad will be from the Southwest.
N/A Diversion ditch(es) shall be constructed on the
side of the location (above/below) the cut slope, draining to
the
N/A Soil compacted earthen berm(s) shall be placed on the
side(s) of the location between the
N/A The drainage(s) shall be diverted around the sides of the well pad location
N/A The reserve pit and/or pad locations shall be constructed long and
narrow for topographic reasons
X Corners No. 6 & 8 will be rounded off to minimize the fill.

FENCING REQUIREMENTS

All pits will be fenced according to the following minimum standards:

- A. 39 inch net wire shall be used with at least one strand of barbed wire on top of the net wire. (barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence).
- B. The net wire shall be no more than 2 inches above the ground. The barbed wire strand shall be 3 inches above the net wire. Total height of the fence shall be at least 42 inches.
- C. Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.
- D. Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than 16'.
- E. All wire shall be stretched by using a stretching device before it is attached to the corner posts.

The reserve pit fencing will be on the three sides during drilling operations and on the fourth side when the rig moves off the location. Pits will be fenced and maintained until clean-up.

Each existing fence to be crossed by the access road shall be braced and tied off before cutting so as to prevent slacking of the wire. The opening shall be closed temporarily as necessary during construction to prevent the escape of livestock, and upon completion of construction the fence shall be repaired to BIA or SMA specifications. A cattleguard with an adjacent 16 foot gate shall be installed in any fence where a road is to be regularly travelled. If the well is a producer, the cattleguards (shall/shall not) be permanently mounted on concrete bases. Prior to a new road, crossing any fence located on federal land, or any fence between federal land and private land, the operator will contact the BIA, who will in turn contact the grazing permittee or owner of said fence and offer him/her the opportunity to be present when the fence is cut in order to

satisfy himself/herself that the fence is adequately braced and tied off.

10. PLANS FOR RESTORATION OF SURFACE

A. PRODUCING LOCATION

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, materials, trash, and junk not required for production.

Immediately upon well completion, any hydrocarbons on the pit shall be removed in accordance with CFR 3162.7-1.

If a plastic nylon reinforced liner is used, it shall be torn and perforated before backfilling of the reserve pit.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximate natural contours. The reserve pit will be reclaimed within 120 days from the date of well completion (weather permitting). Before any dirt work takes place, the reserve pit will be completely dry and all cans, barrels, pipe, fluid, and hydrocarbons, will be removed.

Contact appropriate surface management agency for required seed mixture.

B. DRY HOLE/ABANDONED LOCATION

At such time as the well is plugged and abandoned, the operator will submit a subsequent report of abandonment and BIA will attach the appropriate surface rehabilitation conditions of approval.

ON BIA Administered lands:

Abandoned well sites, roads, or other disturbed areas will be restored to near their original condition. This procedure will include: (a) reestablishing irrigation systems where applicable, (b) reestablishing soil conditions in irrigated fields in such a way as to ensure cultivation and harvesting of crops and, (c) ensuring revegetation of the disturbed areas to the specifications of the Ute Indian Tribe or the BIA at the time of abandonment.

11. SURFACE OWNERSHIP

Access road:

Ute Indian Tribe

Location:

Ute Indian Tribe

12. <u>OTHER INFORMATION</u>

A. Petroglyph Operating Co., Inc. will inform all persons in the area who are associated with this project that they are subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator will immediately stop work that might further disturb such materials, and contact the AO. Within five working days the AO will inform the operator as to:

-whether the materials appear eligible for the National Register of historic Places;

the mitigation measures the operator will likely have to undertake before the site can be used.

-a time frame for the AO to complete an expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wished, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials that may be required. Otherwise, the operator will be responsible for mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that required mitigation has been completed, the operator will then be allowed to resume construction.

B. As operator, Petroglyph Operating Co., Inc. will control noxious weeds along Right-of-Ways for roads, pipelines, well sites, or other applicable facilities. A list of noxious weeds will be obtained from the BIA,

or the appropriate County Extension Office. On BIA administered land, a Pesticide Use proposal shall be submitted, and given approval, prior to the application of herbicides or other pesticides or possible hazardous chemicals.

C. Drilling rigs and/or equipment used during drilling operations on this well site will not be stacked or stored on Tribal Lands after the conclusion of drilling operations or at any other time without BIA authorization. However, if BIA authorization is obtained, it is only a temporary measure to allow time to make arrangements for permanent storage on commercial facilities.

On BIA administered land:

Operator's employees, including subcontractors, will not gather firewood along roads constructed by operators. If wood cutting is required, a permit will be obtained from the Forestry Department of the BIA pursuant to 25 CFR 169.13 "Assessed Damages Incident to Right-of-Way authorization". All operators, subcontractors, vendors, and their employees or agents may not disturb saleable timber (including firewood) without a duly granted wood permit from the BIA Forester.

If the surface rights are owned by the Ute Indian Tribe and mineral rights are owned by another entity, an approved right-of-way will be obtained from the BIA before the operator begins any construction activities. If the surface is owned by another entity and the mineral rights are owned by the Ute Indian Tribe, rights-of-way will be obtained from the other entity.

All roads constructed by operators on the Uintah and Ouray Indian Reservation will have appropriate signs. Signs will be neat and of sound construction. They will state: (a) that the land is owned by the Ute Indian Tribe, (b) the name of the operator, (c) that firearms are prohibited to all non-Ute Tribal members (d) that permits must be obtained from the BIA before cutting firewood or other timber products, and (e) only authorized personnel permitted. All well site locations on the Uintah and Ouray Indian Reservation will have an appropriate sign indicating the name of the operator,

the lease serial number, the well name and number, the survey description of the well (either footage or the quarter-quarter section, the section, township, and range).

N/A	_No construction or drilling activities shall be conducted between
	andbecause of
N/A_	_No surface occupancy will be allowed within 1,000 feet of any sage grouse strutting ground.
N/A	_No construction or exploration activities are permitted within 1.5
	mile radius of sage grouse strutting grounds from April 1 to June 30.
N/A	There shall be no surface disturbance within 600 feet of live water
	(includes stock tanks, springs, and guzzlers).
N/A	_No cottonwood trees will be removed or damaged.
N/A	_Pond will be constructed according to BLM specifications
	approximatelyft of the location, as flagge
	on onsite.

LESSEE'S OR OPERATOR'S REPRESENTATIVE AND CERTIFICATION

PERMITTING	OPERATIONS
Ed Trotter	Vince Guinn
1620 West 750 North	P.O. Box 607
Vernal UT 84078	Roosevelt, UT 84066
Telephone # (801)789-4120	(801) 722-2531
Fax # (801) 789-1420	Fax # (801) 722-9145

All lease/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approval plan of operations, and any applicable Notice to Lessees. Petroglyph Operating Co., Inc. is fully responsible for the actions of their subcontractors. A copy of these conditions will be furnished to the field representative to insure compliance.

A copy of the approved APD and ROW grant, if applicable, shall be on location during construction of the location and drilling activities.

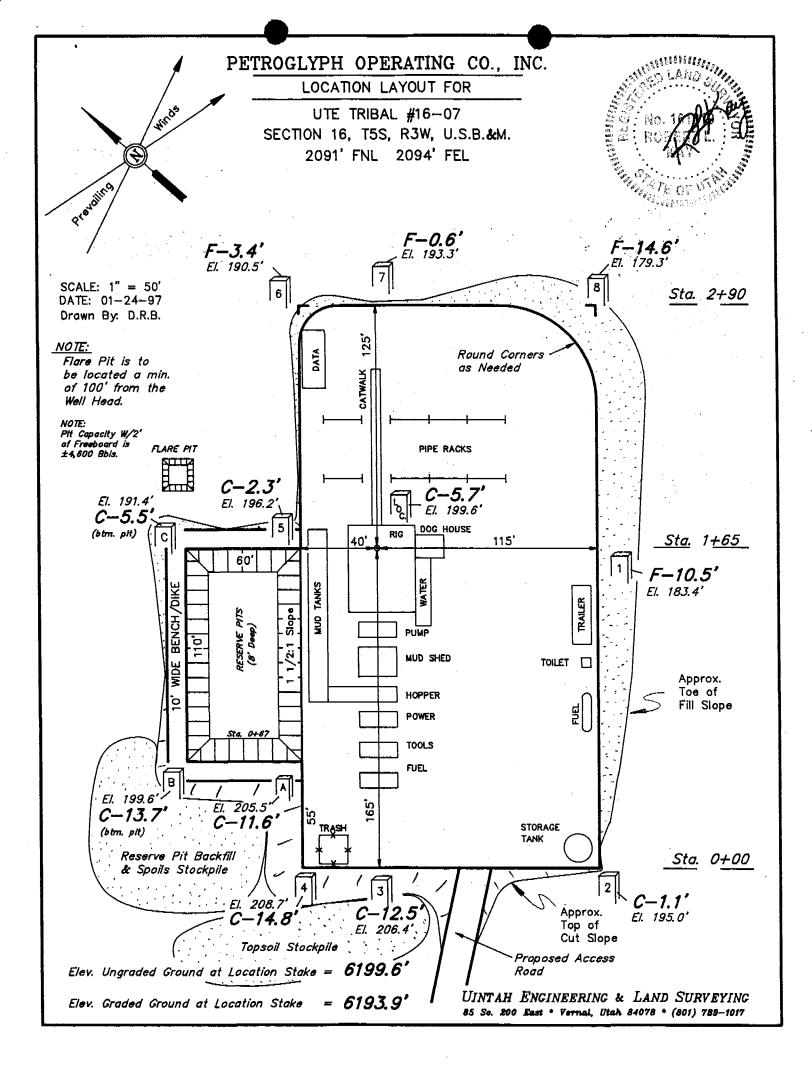
The BIA Office shall be notified upon site completion prior to moving on the drilling rig.

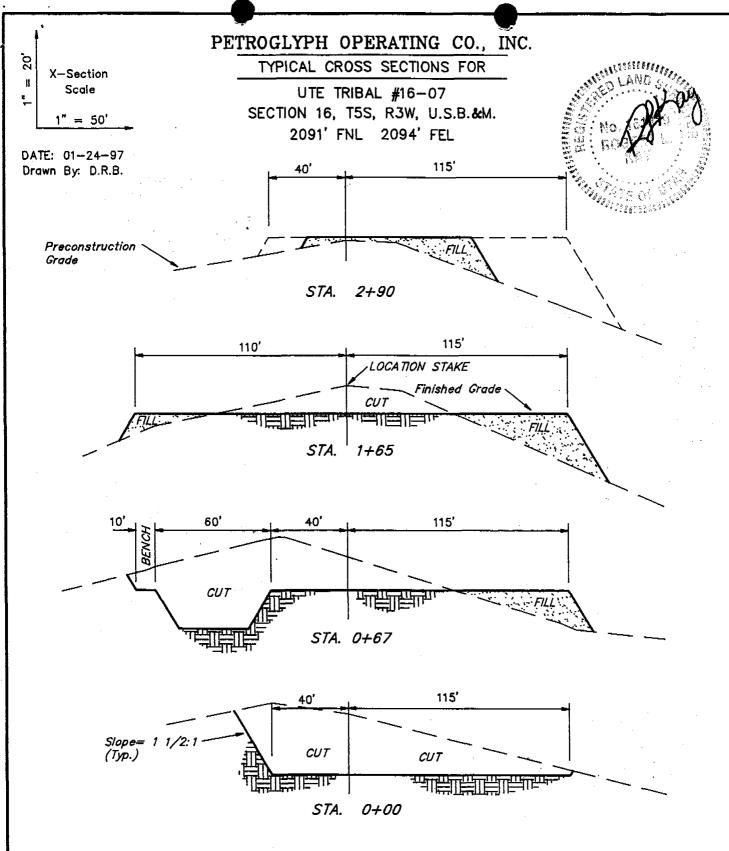
Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in the Plan are to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Petroglyph Operating Co., Inc. and its contractors and sub-contractors in conformity with this Plan and the terms and conditions under which it is approved.

3.7-91

Date





APPROXIMATE YARDAGES

(12") Topsoil Stripping = 1,910 Cu. Yds.

Remaining Location = 6,880 Cu. Yds.

TOTAL CUT = 8,790 CU.YDS.

FILL = 5,870 CU.YDS.

EXCESS MATERIAL AFTER

5% COMPACTION

= 2,610 Cu. Yds.

Topsoil & Pit Backfill

= 2,610 Cu. Yds.

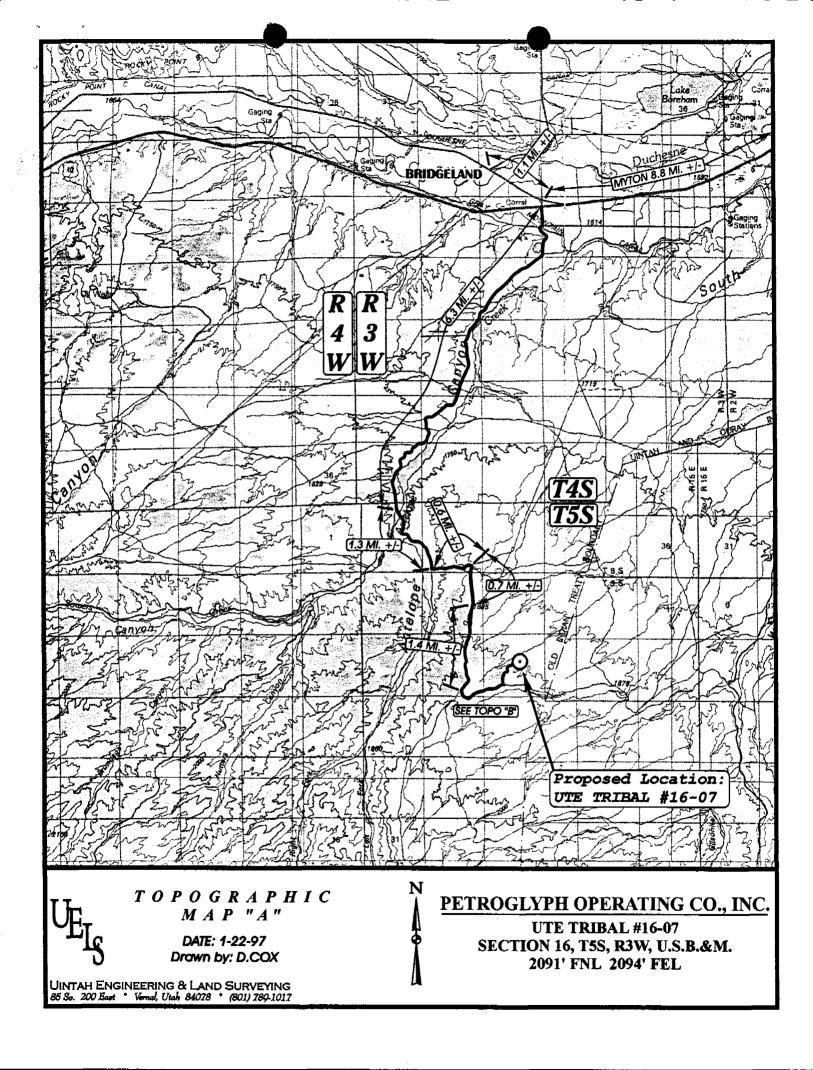
(1/2 Pit Vol.)

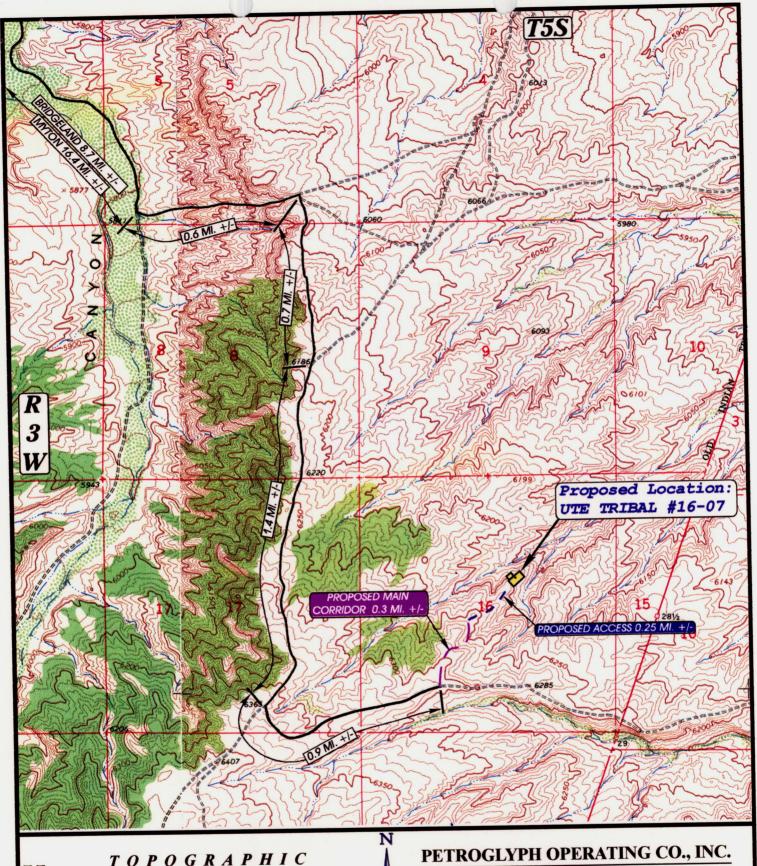
EXCESS UNBALANCE

= 0 Cu. Yds.

(After Rehabilitation)

UINTAH ENGINEERING & LAND SURVEYING 85 Sc. 200 East * Vernal, Utah 84078 * (801) 789-1017





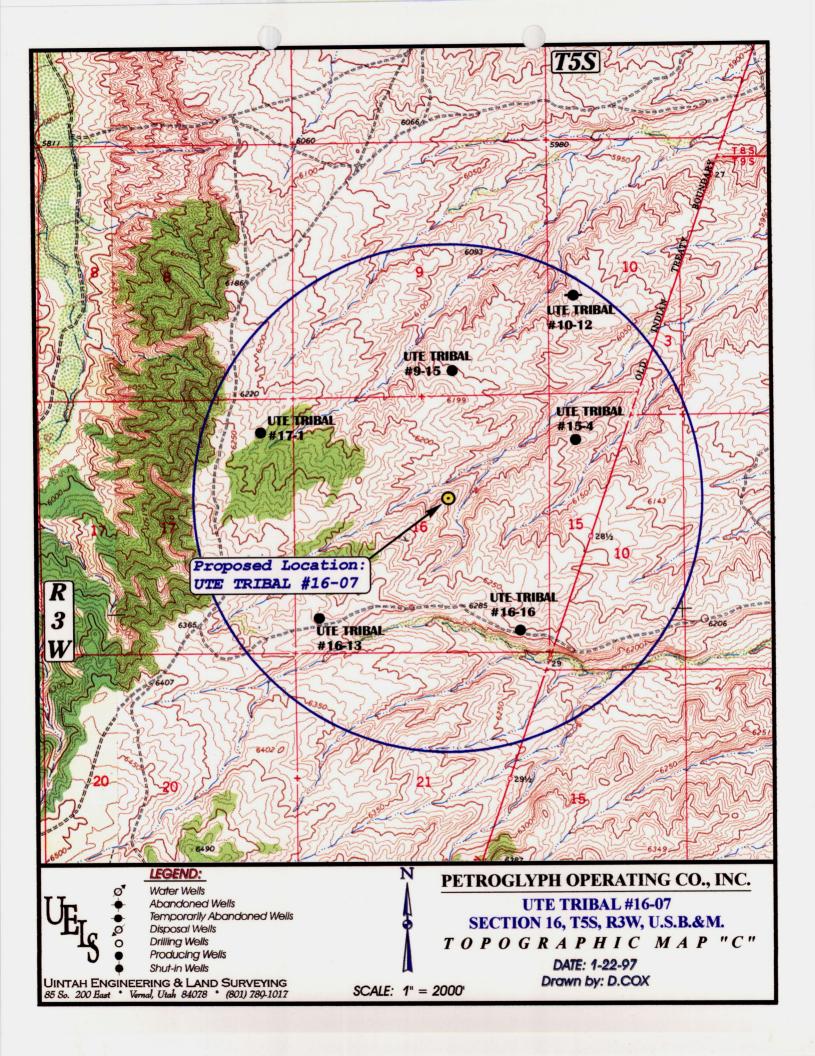
TOPOGRAPHIC M A P "B"

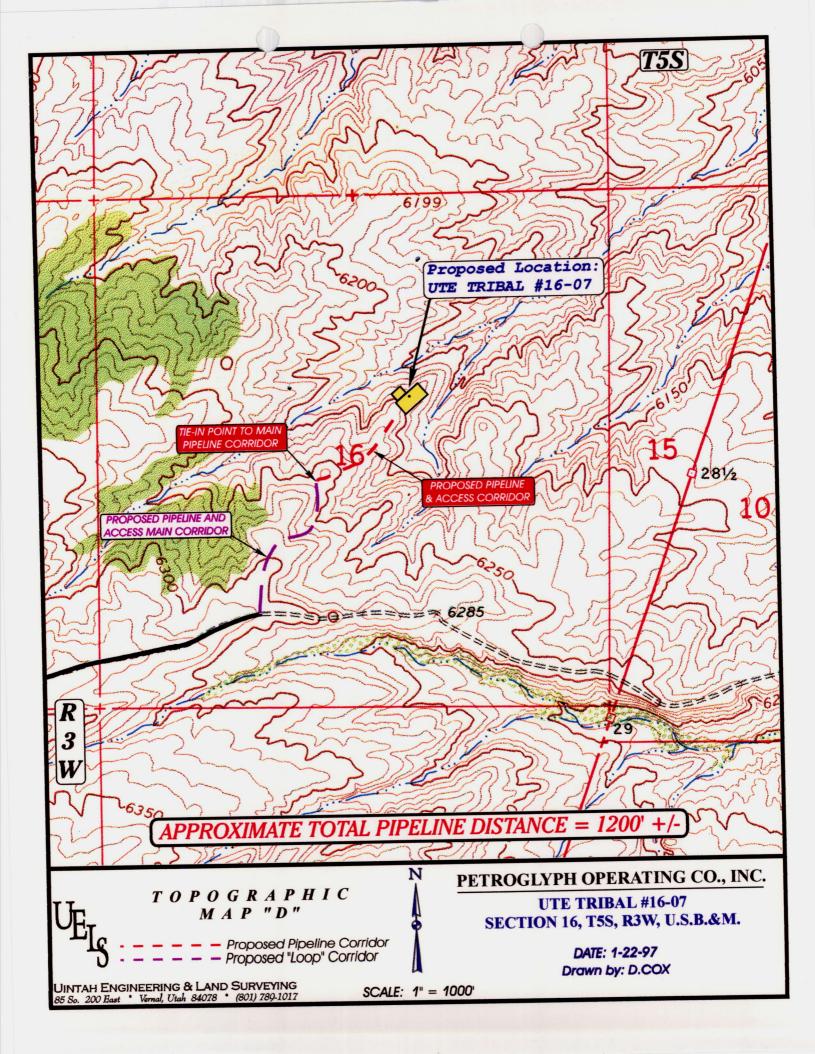
> DATE: 1-22-97 Drawn by: D.COX

UINTAH ENGINEERING & LAND SURVEYING 85 So. 200 East * Vernal, Utah 84078 * (801) 789-1017

UTE TRIBAL #16-07 SECTION 16, T5S, R3W, U.S.B.&M. 2091' FNL 2094' FEL

SCALE: 1" = 2000'





WORKSHEET APPLICATION FOR PERMIT TO DRILL

API NO. ASSIGNED: 43-013-31854 APD RECEIVED: 03/11/97 WELL NAME: UTE TRIBAL 16-07 OPERATOR: PETROGLYPH OPERATING (N3800) INSPECT LOCATION BY: PROPOSED LOCATION: SWNE 16 - T05S - R03W TECH REVIEW Initials SURFACE: 2091-FNL-2094-FEL Date BOTTOM: 2091-FNL-2094-FEL DUCHESNE COUNTY Engineering ANTELOPE CREEK FIELD (060) Geology LEASE TYPE: IND LEASE NUMBER: 14-20-H62-3511 Surface PROPOSED PRODUCING FORMATION: GRRV RECEIVED AND/OR REVIEWED: LOCATION AND SITING: R649-2-3. Unit: <u>√</u> Plat Bond: Federal [State] Fee] √ R649-3-2. General. (Number <u>80 4556</u>) ∉ Potash (Y√N) ____ R649-3-3. Exception. √ Oil shale (Y/N) Water permit (Number $\mu 3$ -M RDCC Review (Y/N) 43-10152 Drilling Unit. Board Cause no: ____ (Date: ____ Date: ____ COMMENTS: STIPULATIONS:

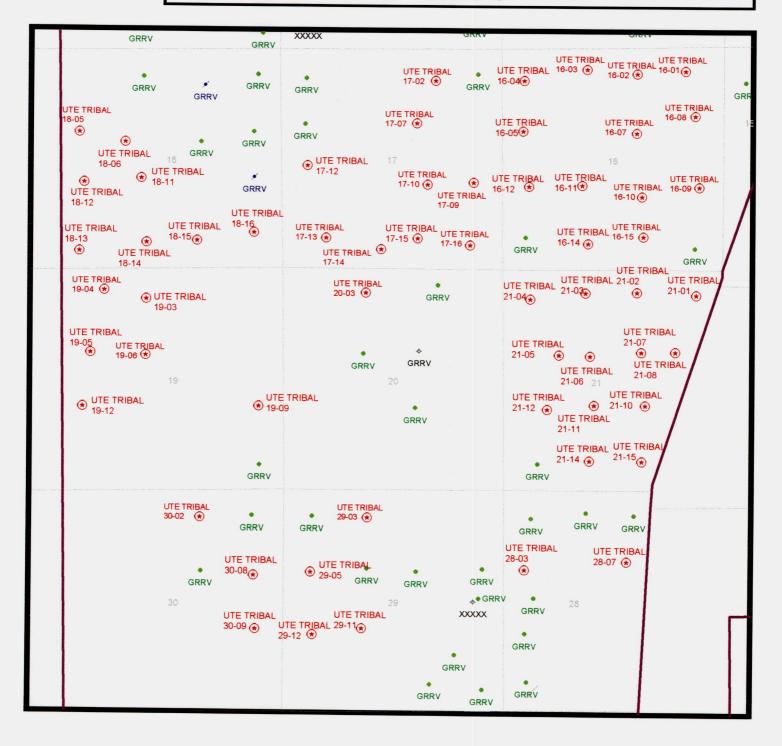
OPERATOR: PETROGLYPH

FIELD: ANTELOPE CREEK (060)

SEC. TWP. RNG: 16,17,18,19,29,33, T5S, R3W

COUNTY: DUCHESNE

UAC: R649-3-2 & R649-3-3



PREPARED:

DATE: 13-MAR-97

State of Utah DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt Governor Ted Stewart Executive Director James W. Carter Division Director 1594 West North Temple, Suite 1210 Box 145801 Salt Lake City, Utah 84114-5801 801-538-5340 801-359-3940 (Fax) 801-538-7223 (TDD)

March 25, 1997

Petroglyph Operating Company, Inc. P.O. Box 607 Roosevelt, Utah 84066

Re: Ute Tribal 16-07 Well, 2091' FNL, 2094' FEL, SW NE, Sec. 16, T. 5 S., R. 3 W., Duchesne County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-013-31854.

Sincerely,

Associate Director

lwp

Enclosures

cc: Duchesne County Assessor

Bureau of Land Management, Vernal District Office

Operator:	Petroglyph Operating Company,	Inc.
Well Name & Number	: Ute Tribal 16-07	
API Number:	43-013-31854	
Lease:	14-20-H62-3511	
Location:SW N	E Sec. 16 T. 5 S. R	3 W.

Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for Permit to Drill.

2. Notification Requirements

Notify the Division within 24 hours following spudding the well or commencing drilling operations. Contact Jimmie Thompson at (801)538-5336.

Notify the Division prior to commencing operations to plug and abandon the well. Contact R. J. Firth (801)538-5274 or Mike Hebertson at (801) 538-5333.

3. Reporting Requirements

All required reports, forms and submittals shall be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

UNITED STATES DEPARTMENT OF THE INTERIOR

SUBMIT IN TRIL TE*

(Other instructions on reverse side)

FORM APPROVED OMB NO. 1004-0136 Expires: February 28, 1995

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b. TYPE OF WELL	_			NGLE [""] MULTIP	rus (T		
WELL X W	ELL OTHER			NE ZONE	<u>"- </u>	8. FARM OR LEASE NAME, WELL	NO
2. NAME OF OPERATOR		manu TNC	,			UTE TRIBAL	
PETROGLYPH 3. ADDRESS AND TELEPHONE NO.	OPERATING COM	PANI, INC	•			#16-07	
P.O. BOX 60	7, ROOSEVELT,	UT 840	66			10. FIELD AND POOL, OR	WILDCAT
4. LOCATION OF WELL (R	eport location clearly and	in accordance wit	h any S	tate requirements.*)		ANTELOPE CI	
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6193.9'GRAD	ED GROUND				<u></u> -	MARCH, 199	
23.		PROPOSED CAS	ING ANI	CEMENTING PROGRA	M		
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IN ABOVE SPACE DESCRI	BE PROPOSED PROGRAM: 1	f proposal is to deepen	, give dat	a on present productive zone	and propos	ed new productive zone. If pr	oposal is to drill or
	tinent data on subsurface location	ons and measured and	true vertic	al depths. Give blowout prev	enter prograi	m, it any.	
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PERMIT NO.	not warrant or pertifu that the ar	policant holds legal or	outable t	And the same of the property of	t lease which	would entitle the applicant to co	nduct operations thereon.
Application approval does CONDITIONS OF APPROVA		Arrente trouse refere of				•	
			Ass	istant Field Manage	r		
MEM 1.	K 1	<u>,0</u>		/lineral Resources	•	MAR 24	1997
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COAs Page 1 of 9 Well No.: Ute Tribal 16-07

CONDITIONS OF APPROVAL APPLICATION FOR PERMIT TO DRILL

Company/Operator: Petroglyph Operating Company Inc.
N
Well Name & Number: <u>Ute Tribal 16-07</u>
API Number: <u>43-013-31854</u>
Lease Number:14-20-H62-3511
Location: SWNE Sec. 16 T.5S B. 3W

For more specific details on notification requirements, please check the Conditions of Approval for Notice to Drill and Surface Use Program.

COAs Page 2 of 9

Well No.: Ute Tribal 16-07

CONDITIONS OF APPROVAL FOR NOTICE TO DRILL

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Be aware fire restrictions may be in effect when location is being constructed and/or when well is being drilled. Contact the appropriate Surface Management Agency for information.

A. DRILLING PROGRAM

1. <u>Estimated Depth at Which Oil, Gas, Water, or Other Mineral Bearing Zones are</u> Expected to be Encountered

Report <u>ALL</u> water shows and water-bearing sands to Tim Ingwell of this office **prior to setting the next casing string or requesting plugging orders**. Faxed copies of State of Utah form OGC-8-X are acceptable. If noticeable water flows are detected, submit samples to this office along with any water analyses conducted.

All usable water and prospectively valuable minerals (as described by BLM at onsite) encountered during drilling, will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

2. Pressure Control Equipment

The BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc., for a 2M system and individual components shall be operable as designed. Chart recorders shall be used for all pressure tests.

Test charts, with individual test results identified, shall be maintained on location while drilling and shall be made available to a BLM representative upon request.

If an air compressor is on location and is being utilized to provide air for the drilling medium while drilling, the special drilling requirements in Onshore Oil and Gas Order No. 2, regarding air or gas drilling shall be adhered to. If a mist system is being utilized then the requirement for a deduster shall be waived.

3. Casing Program and Auxiliary Equipment

Surface casing shall have centralizers on the bottom three joints, with a minimum of one centralizer per joint.

As a minimum, the usable water shall be isolated and/or protected by having a cement top for the production casing at least 200 ft. above the shallowest potential productive zone. If gilsonite is encountered while drilling, it shall be isolated and/or protected via the cementing program.

COAs Page 3 of 9
Well No.: Ute Tribal 16-07

4. Mud Program and Circulating Medium

Hazardous substances specifically listed by the EPA as a hazardous waste or demonstrating a characteristic of a hazardous waste will not be used in drilling, testing, or completion operations.

No chromate additives will be used in the mud system on Federal and Indian lands without prior BLM approval to ensure adequate protection of fresh water aquifers.

5 .Coring, Logging and Testing Program

Daily drilling and completion progress reports shall be submitted to this office on a weekly basis.

All Drill Stem tests (DST) shall be accomplished during daylight hours, unless specific approval to start during other hours is obtained from the AO. However, DSTs may be allowed to continue at night if the test was initiated during daylight hours and the rate of flow is stabilized and if adequate lighting is available (i.e., lighting which is adequate for visibility and vaporproof for safe operations). Packers can be released, but tripping should not begin before daylight unless prior approval is obtained from the AO.

A cement bond log (CBL) will be run from the production casing shoe to the top of the cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.

Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164. Two copies of all logs, core descriptions, core analyses, well-test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. Samples (cuttings, fluids, and/or gases) will be submitted when requested by the AO.

6. Notifications of Operations

No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the AO. If operations are to be suspended, prior approval of the AO will be obtained and notification given before resumption of operations.

Operator shall report production data to MMS pursuant to 30 CFR 216.5 using form MMS/3160.

<u>Immediate Report</u>: Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported in accordance with the requirements of NTL-3A or its revision.

COAs Page 4 of 9 Well No.: Ute Tribal 16-07

If a replacement rig is contemplated for completion operations, a "Sundry Notice" (Form 3160-5) to that effect will be filed, for prior approval of the AO, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig.

The date on which production is commenced or resumed will be construed for oil wells as the date on which liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which liquid hydrocarbons are first produced into a permanent storage facility, whichever first occurs; and, for gas wells as the date on which associated liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which gas is first measured through permanent metering facilities, whichever first occurs.

Should the well be successfully completed for production, the AO will be notified when the well is placed in a producing status. Such notification will be sent by telegram or other written communication, not later than five (5) days following the date on which the well is placed on production.

Gas produced from this well may not be vented or flared beyond an initial authorized test period of 30 days or 50 MMCF following its completion, whichever occurs first, without the prior written approval of the Authorized Officer. Should gas be vented or flared without approval beyond the authorized test period, the operator may be directed to shut-in the well until the gas can be captured or approval to continue venting or flaring as uneconomic is granted and the operator shall be required to compensate the lessor for that portion of the gas vented or flared without approval which is determined to have been avoidably lost.

A schematic facilities diagram as required by 43 CFR 3162.7-2, 3162.7-3, and 3162.7-4 shall be submitted to the appropriate District Office within thirty (30) days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with 43 CFR 3162.7-4.

No well abandonment operations will be commenced without the prior approval of the AO. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the AO. A "Subsequent Report of Abandonment" Form 3160-5, will be filed with the AO within thirty (30) days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the AO or his representative, or the appropriate Surface Managing Agency.

COAs Page 5 of 9 Well No.: Ute Tribal 16-07

7. Other Information

All loading lines will be placed inside the berm surrounding the tank battery.

All off-lease storage, off-lease measurement, or commingling onlease or off-lease will have prior written approval from the AO.

The oil and gas measurement facilities will be installed on the well location. The oil and gas meters will be calibrated in place prior to any deliveries and tested for meter accuracy at least quarterly thereafter. The AO will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports will be submitted to the Vernal District Office. All meter measurement facilities will conform with Onshore Oil & Gas Order No. 4 for liquid hydrocarbons and Onshore Oil & Gas Order No. 5 for natural gas measurement.

The use of materials under BLM jurisdiction will conform to 43 CFR 3610.2-3.

There will be no deviation from the proposed drilling and/or workover program without prior approval from the AO. Safe drilling and operating practices must be observed. All wells, whether drilling, producing, suspended, or abandoned will be identified in accordance with 43 CFR 3162.

"Sundry Notice and Report on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3162.3-2.

Section 102(b)(3) of the Federal Oil and Gas Royalty Management Act of 1982, as implemented by the applicable provisions of the operating regulations at Title 43 CFR 3162.4-1(c), requires that "not later than the 5th business day after any well begins production on which royalty is due anywhere on a lease site or allocated to a lease site, or resumes production in the case of a well which has been off production for more than 90 days, the operator shall notify the authorized officer by letter or sundry notice, Form 3160-5, or orally to be followed by a letter or sundry notice, of the date on which such production has begun or resumed."

If you fail to comply with this requirement in the manner and time allowed, you shall be liable for a civil penalty of up to \$10,000 per violation for each day such violation continues, not to exceed a maximum of 20 days. See Section 109(c)(3) of the Federal Oil and Gas Royalty Management Act of 1982 and the implementing regulations at Title 43 CFR 3162.4-1(b)(5)(ii).

APD approval is valid for a period of one (1) year from the signature date. An extension period may be granted, if requested, prior to the expiration of the original approval period.

COAs Page 6 of 9 Well No.: Ute Tribal 16-07

In the event after-hours approvals are necessary, please contact one of the following individuals:

Ed Forsman (801) 789-7077

Petroleum Engineer

Wayne P. Bankert (801) 789-4170

Petroleum Engineer

Jerry Kenczka (801) 781-1190

Petroleum Engineer

BLM FAX Machine (801) 781-4410

COAs Page 7 of 9 Well No.: Ute Tribal 16-07

EPA'S LIST OF NONEXEMPT EXPLORATION AND PRODUCTION WASTES

While the following wastes are nonexempt, they are not necessarily hazardous.

Unused fracturing fluids or acids

Gas plant cooling tower cleaning wastes

Painting wastes

Oil and gas service company wastes, such as empty drums, drum rinsate, vacuum truck rinsate, sandblast media, painting wastes, spend solvents, spilled chemicals, and waste acids

Vacuum truck and drum rinsate from trucks and drums, transporting or containing nonexempt waste

Refinery wastes

Liquid and solid wastes generated by crude oil and tank bottom reclaimers

Used equipment lubrication oils

Waste compressor oil, filters, and blowdown

Used hydraulic fluids

Waste solvents

Waste in transportation pipeline-related pits

Caustic or acid cleaners

Boiler cleaning wastes

Boiler refractory bricks

Incinerator ash

Laboratory wastes

Sanitary wastes

Pesticide wastes

Radioactive tracer wastes

Drums, insulation and miscellaneous solids.

COAs Page 8 of 9 Well No.: Ute Tribal 16-07

SURFACE USE PROGRAM Conditions of Approval (COAs)

The Surface Use Conditions of Approval all come from the Bureau of Indian Affairs Concurrence Memorandum and Site Specific Environmental Analysis.

The Ute Tribe Energy and Mineral Department is to be notified 48 hours prior to construction. A Tribal Technician is to monitor construction.

Fifty (50) foot wide Rights-Of-Way (ROWs) corridor shall be granted for the following:

Access roads which shall have constructed travel width limited to 22 feet, except as granted for sharp curves or intersections.

Surface pipelines shall be limited to 13 feet of the ROW. The pipeline will be constructed to lay on the soil surface, and the ROW for the pipeline will not be bladed or cleared of vegetation.

Where pipelines are constructed parallel to roads they may be welded on the road and then lifted from the road onto the ROW. Where pipelines cross country between stations, they shall be welded in place at wellsites or on roads and then pulled into place with suitable equipment. Traffic will be restricted along these areas so that the pipeline ROW will not be used as an access road.

Buried pipelines shall be buried a minimum of 3 feet below the soil surface within an area of disturbance limited to 15 feet wide, and construction will be monitored by a Tribal Technician.

Buried pipelines adjacent to access roads shall be buried within 1.5 feet from the outside edge of the barrow ditch. Any additional buried pipelines shall be parallel to the outer side of the first buried pipeline and shall be constructed as close to the first pipeline as safety requirements allow.

After construction of the buried pipeline is completed the disturbed area of the ROW shall be contoured to blend into the natural landscape and it shall be reseeded with desirable vegetation as recommended by the BIA. Between September 15 and November 1 of the year following pipeline construction all disturbed areas shall be reseeded with perennial vegetation according to BIA, or Ute Tribe specifications.

Petroglyph will assure the Ute Tribe that any/all contractors and subcontractors have acquired a Tribal Business License and have access permits prior to construction.

All vehicular traffic, personnel movement, construction, and restoration activities shall be confined to the areas examined, as referenced in report, and to the existing roadways and/or evaluated access routes.

COAs Page 9 of 9 Well No.: Ute Tribal 16-07

All personnel should refrain from collecting artifacts and from disturbing any significant cultural resources in the area.

The Ute Tribe Energy & Mineral Department shall be consulted if cultural remains from subsurface deposits are exposed or identified during construction.

Before the site is abandoned, the company will be required to restore the well site and ROWs to near their original state. The disturbed areas will be reseeded with desirable perennial vegetation.

Noxious weeds will be controlled on the well site and rights-of-way. If noxious weeds spread from the project area onto adjoining land, the company will also be responsible for their control.

Reserve pits will be lined with impervious synthetic liners. Prior to backfilling the reserve pit all fluids will be pumped from the pit into trucks and hauled to approved disposal sites. When the reserve pits are backfilled the cuttings and mud, etc. left in them to be buried will be buried a minimum of three feet below the surface of the soil.

A closed production system will be used. Production fluids will be contained in leak proof tanks. All production fluids will be disposed of at approved disposal sites. The indiscriminate dumping of production fluids on roads, wellsites or other areas will not be allowed.

Firewood shall be stockpiled at convenient locations near the wellsite and along the access road.

Upon completion of the project approved under this Application for Permit to Drill and Right-of-way, the Ute Tribe Energy & Minerals Resources Department will be notified by Petroglyph Operating Company so that a Tribal Technician can verify Affidavit of Completion's.

DATE:

MAR. 17:1997

REPLY TO ATTN OF:

SUBJECT:

Superintendent, Uintah & Ouray Agency

Concurrace Letter for PETROGLYPH OPERATING CO. INC.

UT 16-08, SEC. 16, SENE UT 16-03, SEC. 16, NENW

UT 16-01 to tie into UT 16-02. UT 16-09, SEC. 16, NESE

UT 16-10, SEC. 16, NWSE Sec. 16, N/2NE,

TO: UT 16-07, SEC. 16, SWSE & NESW,

UT 16-15, SEC. 16, SWSE

Bureau of Land Management, Vernal District Office

MAR 2 0 1997

EFCEIVED

Attention: Minerals and Mining Division

We recommend approval of the Application for Permit to Drill on the subject well.

Based on available information received on March 17, 1997, we cleared the proposed location in the following areas of environmental impact.

YES_x NO ___ Listed threatened or endangered species

YES _x__ NO ___ Critical wildlife habitat

YES _x__ NO ____ Archaeological or cultural resources

YES __ NO ___ Air quality aspects (to be used only if

project is in or adjacent to a Class I area

REMARKS: The Ute Tribe Energy & Minerals Department is recommending the following criteria to be adhered during all phases of construction activities.

- 1. The Ute TribeEnergy and Minerals Department is to be notified 48 hours prior to construction as a Tribal Technician is to monitor construction.
- 2. 50 foot corridor rights-of-way shall be granted with the following:
 - A. Buried pipeliknes shall be buried minimum of 3 feet below soil surface.
 - B. Access roads shall be limited to 22 feet, except as granted for sharp turns.
 - C. Surface pipelines shall be limited to 13 feet wide,.
- D. Buried pipeline shall be limited to 15 feet wide, and construction will be monitored by Tribal
- 3. Pipelines adjacent to access roads shall be buried within 1.5 feet from the outside edge of the barrow ditch. Additional pipelines shall be parallel to each other, as safety requirements will allow.
- 4. Petroglyph Operating Co. Inc. will assure the Ute Tribe that any/all contractors and any subcontractors has acquired a Tribal Business License and have an access permits prior to construction.
- 5. All vehicular traffic, personnel movement, construction and restoration operations should be confined to the areas examined, as referenced in report, and to the existing roadways and/or evaluated access routes.
- 6. All mitigative stipulations contained in the Bureau of Indian Affairs, combined site specific Environmental Analysis (EA), will be strictly adhered.
- 7. All personnel should refrain from collecting artifacts and from disturbing any significant cultural resources in the area.
- 8. The personnel from the Ute Tribe Energy & Minerals Department should be consulted, should cultural remains from subsurface deposits be exposed during construction work.
- 9. Upon completion of Application for Right-of-way, the Ute Tribe Energy and Minerals Department will be notified by Petroglyph Operating Co. Inc., so that a Tribal Technician can verify ATTACHMENT: (7) BIA Environmental Analysis, for each location.

DIVISION OF OIL, GAS AND MINING

CUNFIDENTIAL SPUDDING INFORMATION

Name of Company: PETROGLYPH OPERATING
Well Name: <u>UTE TRIBAL 16-07</u>
Api No. <u>43-013-31854</u>
Section: 16 Township: 5S Range: 3W County: DUCHESNE
Drilling Contractor UNION
Rig # 16
SPUDDED:
Date_5/16/97
Time
How ROTARY
Drilling will commence
Reported by DEANNA BELL
Telephone # 1-801-722-2531
Date: 5/16/97 Signed: JLT

ADDRESS	P.O.	Box	607

Roosevelt, UT 84066

ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API MUNBER	WELL NAME							
					90	SC	TP	OCATIO) N	SPUO	EFFECTIV
В	12083 -	7	43-013-31854	Ute Tribal 16-07	SWNE	1		 	COOM	DATE	DATE
ELL 1 CO	MMENTS:		E Isla	11 15 15 00 1	DAIAE	10	5,5	3W	Duchesne	5–17–97	
		T76 P0	Entity a	dded 12-15-97. Lec							<u> </u>
		ote Tr	10a1 16-07 W1	Il tie into tank battery at	the Ute	Triba	11 16-	06			
			Т			•					
									T		
ELL 2 CO	HHENTS:	•							ŀ		
1											
]						7			7	
ELL 3 COL	MENTS:]			1	
				;							
										,	
LL 4 COM	HENTS:		L				- 1	- 1		1 1	
	-			•			•				
			1						<u> </u>		
LL 5 CUHI	MENTS:]	- 1			
											

ACTION CODES (See instructions on back of form)

A - Establish new entity for new well:(single well only)

G - Add new well to existing entity (group or unit well)

C - Re-assign well from one existing entity to another existing entity

D - Re-assign well from one existing entity to a new entity

E - Other (explain in comments section)

HOTE: Use COMMENT section to explain why each Action Code was selected.

(3/89)

Signature Deanna K.

Operations Coordinator 5-19-97 Title

Phone No. (801) 722-2531

Lisha Cordova

12/11/97

15:59

FAX 8017229145



9/25/97

Petroglyph Operating Company, Inc.

Petroglyph Operating Company, Inc. Operator:

Lease: Ute Tribal 16-07

Elevation:

KB 6204 GL 6194

AP! #:

43-013-31854 16-5S-3W

Property: 50152

AFE/EPE Number:

41324

Location: County, St.:

Duchesne

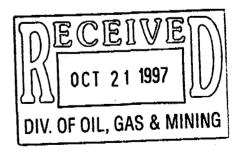
41324

						_
Activity Date	Daily Cost	Activity Descr	iption			
6/11/97	\$5,376.00	PERFORATIONS:			•	
		5240-5245	Green River D (03.4)	4 SPF	20 shots	
		5210-5214	Green River D (03.3)	4 SPF	16 shots	
	1	WELLBORE:				
		6180	RTD			
		6175	LTD			
		6105	PBTD			
		6150	CSA	•	*	
-						

MIRU serv rig & equip. NU frac head & BOPs. RU pump & test 51/2" csg to 4500 psi. PU Tailey & RIH w/ 51/2" BVBP to 5327". Set BVBP & POOH to 5260". Spot 6 bbls 15% HCL @ D3.4 & D3.3 interval & POOH w/ ret head.

RU Schlumberger & perf D3.4 zone @ 5240-45' w/ 4 spf (20 holes) & D3.3 zone @ 5210-14' w/ 4 spf (16 holes). RD Wireline. RiH w/ RTTS to between D3.4 & D3.3 intervals & set RTTS @ 5230'.

Bkdn D3.4 perfs dwn tog @ 1400 psi & inj into perfs @ 31/4 bpm @ 1100 psi. Bkdn D3.3 perfs dwn annulus @ 2400 psi & inject @ 3 bpm @ 1800 psi. Bleed off psi & rel RTTS. POOH to ± 4910' & SWIFN.



9/25/97

Petroglyph Operating Company, Inc.

Operator: Well:		oglyph Tribal		ating Company	r, Inc.	Elevation:	KB 6204 GL 6194
County, St.:	Duç	hesne	ŲT				
Activity D	ate	Daily	Cost	Activity Desc	ription		
6/12/97		\$24,3	371.00	PERFORATIONS:			
				5240-5245	Green River D (03.4)	4 SPF	20 shots
				5210-5214	Green River D (03.3)	4 SPF	16 shots
				WELLBORE:			
				6180	RID		
				6175	LTD		
				6105	PBTD		
		:		6150	CSA		
•							

Open well w/ D3.4 & D3.3 zones brkdwn last PM. This AM SiCP @ 0 psi & SITP @ 0 psi. POOH w/ 51/2" RTTS. RU HES & frac D3.4 & D3.3 zones w/ 11700 gal Boragel 30 & 100000# 20/40 sand @ .5 - 10 ppg. MTP @ 3349 psi. ATP @ 2800 psi. MTR @ 39 bpm. ATR @ 36.4 bpm. ISIP @ 2964 psi. 5 min @ 2854 psi.

Flow well to pit $@ \pm 60$ bph to 0 psi. Circ well clean w/ K wtr. RIH to 3800 & circ clean. Finish RiH & tag sand @ 5215'. Clean out to 5270' & POOH to 5128'. RU & swb well. Made 16 runs. IFL @ surf. Had trace of oil on runs #12 - 16. TWR @ 116 bbls. FFL @ 1300'. SWIFN.

-	1.11	_
⊢ t	1 11	, ,,

Fluid Task Fluid Type frac fluid Boragel 30

Amount 11700 Unit gal

PROPPANT:

1

Type

20/40 sand

Total Lbs: Ramp Range 100000

.5-10

PRESSURE/RATE:

Maximum: Average:

3349 psi 2800 psi

39 BPM

36.4 BPM

SI PRESSURE:

CP

ISIP:

ΤP 2964

5 Min:

2854

FLUID RECOVERY

ZONE BLF: ZONE BLFR: 665 193

ZONE BLFTR: ZONE % REC:

472 29.%

WELL BLF:

665

WELL BLFR:

193

9/25/97

Petroglyph Operating Company, Inc.

Operator: Well:	Petroglyp Ute Tribal		ating Company,	Elevation:	KB 6204 GL 6194	
County, St.:	Duchesne	e UT				
Activity D	ate Dai	y Cost	Activity Descr	iption		
				WELL BLFTR:		472
				WELL % REC:		29.%
6/13/97	\$	1,555.00	PERFORATIONS:	1		
			5240-5245	Green River D (03.4)	4 SPF	20 shots
			5210-5214	Green River D (03.3)	4 SPF	16 shots
			WELLBORE:			
			6180	RTD		
	1		6175	LTD		
			6105	PBTD		•
			6150	CSA		

Open well w/ D3.4 & D3.3 zones swbd to trace of oil & 1300' last PM. This AM SICP @ 600 psi & SITP @ 550 psi. Bleed off tbg & RU to swb. Made 4 runs. IFL @ 600'. Run #1 - top 500' oil. MOC @ trace. FFL @ 700'. TWR @ 25 bbls.

Well started flowing @ \pm 40 bph @ 10:00 AM. Washed out riser on flow tank. SWI. Repair flow line & res flow back. Flowed for 2½ hrs @ \pm 18 bph w/ \pm 200 psi on tbg & 610 psi on csg. SWIFN.

To clean out tank & make room to flow test in AM.

FLUID RECOVERY

ZONE BLF:	000
ZONE BLFR:	301
ZONE BLFTR:	364
ZONE % REC:	45.3%
WELL BLF:	665
WELL BLFR:	301
WELL BLFTR:	364
WELL % REC:	45.3%

9/25/97

Petroglyph Operating Company, Inc.

Operator:	Petroglyph Oper	ating Company,	Inc.	Elevation:	KB 6204
Well:	Ute Tribal 16-07				GL 6194
County, St.:	Duchesne UT			. <u></u>	
Activity Do	te Daily Cost	Activity Descr	iption		
6/14/97	\$779.00	PERFORATIONS:			
		5240-5245	Green River D (03.4)	4 SPF	20 shots
		5210-5214 WELLBORE:	Green River D (03.3)	4 SPF	16 shots
		6180	RTD		
		6175	LTD		
		6105	PBTD		
	1	6150	CSA		
		Washed out bull	@ 1550 psi. SITP @ 1450 psi. Instali choke plug on riser. SD & rebulld riser on tank. S bph oil & 2.5 mcf gas w/ 725 psi on csg	Start flowing @ 12	:50 PM. Well
6/16/97	\$923.00	PERFORATIONS:			
		5240-5245	Green River D (03.4)	4 SPF	20 shots
		5210-5214	Green River D (03.3)	4 SPF	16 shots
		WELLBORE:		•	
		6180	RTD		
		6175	LTD		
		6105	PBTD		

6150

CSA

Open well. SICP @ 1500 psi. SITP @ 1400 psi. Flow well to tank on $\frac{1}{2}$ choke. Flowed for 7 hrs. Avg of 8 bph oil & 2.5 mcf gas. Final csg psi @ 700 psi & tbg psi @ 450 psi. TFR @ 55 bbls. SWIFN.

9/25/97

Petroglyph Operating Company, Inc.

Operator:	Petro	oglyph	Opero	ating Company,	ŧ	Elevation:	KB 6204		
Well:	Ute T	ribal	16-07					GL	6194
County, St.:	Duch	nesne	ŲT			: :			
Activity D	ate	Daily	Cost	Activity Descri	ption	:			
6/17/97		\$9	00.00	PERFORATIONS:					
				5240-5245	Green Riv	er D (03.4)	4 SPF	20	shots
				5210-5214	Green Riv	er D (03.3)	4 SPF	16	shots
				WELLBORE:		:			
				6180	RTD	•			
				6175	LTD				
				6105	PBTD				
		!		6150	CSA				, -

Open well. SICP @ 1400 psi. SITP @ 1400 psi. Flow well to tank to bleed off tbg & csg. RU & pump dwn tbg w/ K wtr to klll well. RIH w/ ret head to sand @ 5230'. Clean out to BVBP @ 5368'. (Note: D3.4 zone covered w/ sand - gas volume must be from D3.3 zone). Rel BVBP & POOH to 5150'. Reset BVBP & test to 3500 psi. POOH to 5000' & SWIFN.

6/18/97	\$14,312.00	PERFORATIONS:			
Ŧ		5240-5245	Green River D (03.4)	4 SPF	20 shots
		5210-5214	Green River D (03.3)	4 SPF	16 shots
		WELLBORE:	:		
		6180	RTD		
		6175	LTD		
		6105	PBTD		
		6150	CSA		

Open well w/ BVBP above D3.4 & D3.3 zones. SICP @ 0 psi. SITP @ 0 psi. Gob plan changed - will not cont w/ original plan). RIH w/ ret head & ret BVBP @ 5160' & POOH. LD BVBP & RIH w/ prod'n string w/ B2 TAC (see detail below).

ND BOPs & frac head. NU prod'n head flange. Set B2 TAC w/ \pm 10000# tension. NU tbg flange & land tbg. RU & swb well to tank. Made 17 runs. IFL @ 800'. MOC @ 2%. TWR @ 121 bbls. FFL @ 2300'. SWIFN.

TUBING DETAIL	LENGTH	DEPTH
КВ	10.00	
2-7/8" 6.5# J55 tbg (162 jts)	5254.24	
51/2" B2 TAC	2.66	5064.24
2-7/8" 6.5# J55 (6 jts)	187.46	
2-7/8" PSN	1.20	5254.36
2-7/8" 6.5# J55 tbg (3 jts)	94.78	
EQT @		5350.34

9/25/97

Petroglyph Operating Company, Inc.

Operator: Well:		oglyph Op Tribal 16-1	erating Company 07	, Inc.	Elevation:	KB 6204 GL 6194	
County, St.:	Duc	chesne	UT				
Activity D	ate	Daily Co	st Activity Desc	ription			
6/19/97		\$1,554.	00 PERFORATIONS:				
			5240-5245	Green River D (03.4)	4 SPF	20 shots	
			5210-5214	Green River D (03.3)	4 SPF	16 shots	
		•	WELLBORE:				
			6180	RTD			
			6175	LTD :			
			6105	PBTD			
		i	6150	CSA			
				1			

Open well w/ prod in tog landed @ \pm 5350' & D3.3 & D3.4 zones swbd to 2300' & MOC @ 2% yesterday. This A.M. SITP @ 300 psi & SICP @ 1000 psi. Bleed dwn well. RU & swb well. Made 2 runs & well started flowing. IFL @ 1300' w/ top 100' oil. Casing psi @ \pm 500 psi. & tbg psi @ \pm 150 psi on ½ choke. (See flow chart for details). TWR @ 78 bbls. TOR @ 20 bbls. SWIFN. Will move rlg from loc in A.M. FINAL REPORT.

Cumulative Cost:

\$49,770.00

Days Since Start:

9

October 15, 1997

Vicky Dyson State of Utah Division of Oil, Gas & Mining 1594 W. North Temple, Ste.1210 Salt Lake City, UT 84114

DIV. OF OIL, GAS & MINING

CONFIDENTIAL

Ms. Dyson:

Enclosed please find the logs listed below for the wells located in Duchesne County, Utah.

Well Name	<u>Loq</u>		
Ute Tribal 19-06	CNL & AIT		
Ute Tribal 16-07	CNL & AIT 2	13 013 31854	TO55 ROBW 16
Ute Tribal 19-05	CNL & AIT	,	
Ute Tribal 18-11	CNL & AIT		
Ute Tribal 15-12	CNL & AIT		
Ute Tribal 16-03	CNL & AIT		
Ute Tribal 14-05	CNL & AIT		
Ute Tribal 19-09	CNL & AIT		
Ute Tribal 16-08	CNL & AIT		
Ute Tribal 19-04	CNL & AIT		
Ute Tribal 07-10	CNL & AIT		
Ute Tribal 19-03	CNL & AIT		
Ute Tribal 30-10	CNL & AIT		
Ute Tribal 30-11	CNL & AIT		

If you need further information, please do not hesitate to call me at 316-665-8500.

Sincerely,

Judy Gates

Petroleum Geology Technician

Form 3160-4 (November 1983) (formedy 9-330)

UNITED STATES
DEPARTMENT OF THE INTERIOR

SUBMIT IN DUPLICATE
(See other instruction

Form approved. Budget Buresu No. 1004-0137 (Expires August 31, 1985)

5. LEASE DESIGNATION AND SERIAL NO. BUREAU OF LAND MANAGEMENT 14-20-H62-3511 6. IF INDIAN, ALOTTEE OR TRIBE NAME WELL COMPLETION OR RECOMPLETION REPORT AND LOG* Ute Indian Tribe 7. UNIT AGREEMENT NAME 1.a. TYPE OF WELL: 14-20-H62-4650 8 FARM OR LEASE NAME b. TYPE OF COMPLETION: Ute Indian Tribe Plug Back Diff. Reserv. Other New Well xx Workover 9 WELL NO 2. NAME OF OPERATOR Ute Tribal 16-07 PETROGLYPH OPERATING COMPANY, INC. 10. FIELD AND POOL, OR WILDCAT 3. ADDRESS OF OPERATOR Antelope Creek P.O. BOX 607, ROOSEVELT, UT 84066 (435) 722-2531 11. SEC., T., R., M., OR BLOCK AND 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* SURVEY OR AREA 2091' FNL 2094' FEL At surface Sec. 16 -T5S-R3W At top prod. interval reported below 13. State DATE ISSUED 12. County or Parish Duchesne Uttah 43-013-31854 At total depth 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 19. ELEV. CASINGHEAD 16. DATE T.D. REACHED 17. DATE COMPLETED (Ready to prod.) 15 DATE SPUDDED 6204' 6194 6/19/97 5/23/97 5/17/97 ROTARY TOOLS CABLE TOOLS 21. PLUG BACK T.D., MD & TVD 22. IF MULTIPLE COMPL., HOW MANY* 23. INTERVALS 20. TOTAL DEPTH, MD & TVD DRILLLED BY 6104 25 WAS DIRECTIONAL SURVEY MADE 24. PRODUCING INTERVAL(S) OF THIS COMPLETION - TOP, BOTTOM, NAME (MD AND TVD)* Green River D3.3, D3.4 27. WAS WELL CORED 26. TYPE ELECTRIC AND OTHER LOGS RUN 10.22-97 Compensated Neutron Litho Density w/ Gamma Ray, AIT CASING RECORD (Report all strings set in well) AMOUNT PULLED CEMENTING RECORD CASING SIZE WEIGHT, LB./FT DEPTH SET (MD) HOLE SIZE 270′ 12-1/4" 200 вхз Турс 5 7-7/8" 110 sxs Highfill 15.5 6150 5-1/2" 325 sxs Thixotropic TUBING RECORD 30 LINER RECORD DEPTH SET (MD) PACKER SET (MD SCREEN (MD) SIZE SIZE TOP BOTTOM (MD) 2-7/8" 5350 ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC 31. PERFORATION RECORD (Interval, size and number) AMOUNT AND KIND OF MATERIAL USED DEPTH INTERVAL (MD) CONFIDENTIAL 5240-45' & 5210-14' D3.4 5240-45' (20 holes) D3.3 5210-14' (16 holes) WELL STAPUS (Producing or shut-in) DATE FIRST PRODUCTION PRODUCTION METHOD (Flowing, gas lift, pumping - size and type of pump) 2-1/2" x 1-3/4" x 16' 40 ring RHAC pump 10/3/97 GAS OIL RATIO HOURS TESTED CHOKE SIZE PROD'N FOR OIL - BBL GAS - MCF. WATER - BBL DATE OF TEST TEST PERIOD, 48 3 10/7/97 WATER - BBL. OIL GRAVITY - API (CORR.) CASING PRESSURE CALCULATED OIL - BBL GAS - MCF. FLOW. TUBING PRESS. 24 HR. RATE CONFIDENTIAL TEST WITNESSED BY 34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) PERIOD Dave Schreiner Sold used for fuel 35. LIST OF ATTACHMENTS 36. I hereby certify that the foregoing and attached information is complete and correct as determined to Operations Coordinator Title * (See Instructions and Spaces for Additional Data on Reverse Side)

UE VERT.	ОЕРТН
TOP TEAS. DEPTH TRUE VERT.	
NAME	
DESCRIPTION, CONTENTS, ETC.	
BOTTOM	CONFIDENTIAL
TOP	4479 4902 4984 5238
FORMATION	BIOB MKP Co5 X MKC Co1 DOPCT K C8.1B (1M2 K D3.3 CUSTIC PUSTIC D3.4 BASAURE

to the second

Parm 3160-4 (November 1983) Manually 9-330)





SUBMIT IN DUPLICATE
(See other instructions of

Form approved.
Budget Burran No. 1004-0137
(Expires August 31, 1985)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DUDGALLOC LAND MANACEMENT

<u> </u>	BUREAU OF LAND MANAGEMENT						5. LEASE DESIGNATION AND SERIAL NO. 14-20-H62-3511	
	WELL CO	OMPLETION OR	RECOMPLETION	REPORT AND LOG			6. IF INDIAN, ALOTTEE (Ute India	
1.a. TYPE OF WELL:		Oil Well	xx Gas Well	Dry Other			7. UNIT AGREEMENT NAME 14-20-H62-4650	
b. TYPE OF COMPLET New Well		Z Deepen	Plug Back	Diff. Reserv. Other			8. FARM OR LEASE NAME Ute Indian Tribe	
2. NAME OF OPERATO		I OPERATING C	OMBANV INC				9. WELL NO. Ute Tribal 16-03	,
3. ADDRESS OF OPERA	TOR						10. FIELD AND POOL, O	
			T 84066 (435) 72				Antelope Creek 11. SEC., T., R., M., OR E	
4. LOCATION OF WELL At surface 2 At top prod. interval re	091' FNL 2094' FEL	rty and in accordance	with any State require	nents) *			SURVEY OR AREA Sec. 16-T5S-R3W	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				14. PERMIT NO.	DATE ISSU	JED	12. County or Parish	13. State
At total depth 6	180'			43-013-31854		3/25/97	Duchesne	Utah
15. DATE SPUDDED	5/17/97	6. DATE T.D. REACE 5/23/97	IRD	17. DATE COMPLETED (Rec 9/4/98	udy to prod.)	18. ELEVATIONS	DF, RKB, RT, GR, ETC.)* 6204'	19. ELEV. CASINGHEAD 61.94"
20. TOTAL DEPTH, MD 6	£ TVD 2	1. PLUG BACK T.D., 6104'	MD & TVD	22. IF MULTIPLE COMPL., HOW 5	'MANY"	23. INTERVALS DRILLLED BY	ROTARY TOOLS	CABLE TOOLS
24. PRODUCING INTERVAL(S) OF THIS COMPLETION TOP, BOTTOM, NAME (MD AND TVD)* Green River D3.3, D3.4, C8.1, C6.1, C5.3, C5, B11				ND TVD)*			25 WAS DIRECTIONAL S No	
26. TYPE ELECTRIC AN		N Density w/ Gamma F	Ray, AIT		•		27. WAS WELL CORED	
28.			CAS	NG RECORD (Report all stri	ngs set in we	u)		
	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTIN	G RECORD		AMOUNT	PULLED
8-5/8"	24	270	12-1/4"	200 sxs Type 5				
5-1/2*	15.5	6150	7-7/8*	110 sxs Highfill 325 sxs Thixtotropic			<u> </u>	
						•		
29.		L	NER RECORD			30.	TUBING I	RECORD
SIZE	TOP	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)		SIZE	DEPTH SET (MD)	PACKER SET (MD)
	·					2-7/8"	5350	
31. PERFORATION REC	ORD Anterval size a	nd marker)	<u> </u>	32.	ACT	D SHOT FRACTUR	I. R. CEMENT SQUEEZE, ET	<u> </u>
	DENTIAL			DEPTH INTERVAL (MID)	T		ND KIND OF MATERIAL	
				4986-90	5677 gais D	elta frac, 10000# 20/	40 prop & 11000# 16/30 pm	эр
C8.1 498	36-90' (16 holes)	C5 4786-90	(16 holes)	4902-05' - 4923-26'	5922 gals I	elts frac, 10000# 20/	40 prop & 11500# 16/30 pr	ър
C6.1 492	3-26' (12 holes)	B11 4528-32	(16 holes)	4840-4 <i>6</i>	7631 gals I	lta frac, 12500# 20/40 prop & 11500# 16/30 prop		
	2-05' (I 2 holes)			4786-90		elta frac, 10000# 20/40 prop & 11000# 16/30 prop elta frac, 10000# 20/40 prop & 11000# 16/30 prop		
	0-46' (24 holes)			4528-32	4780 gais D	elta frac, 10000#20/	40 prop & 11000# 16/30 pr	op
33. DATE FIRST PRODUCTI	CONT IN	BOD SOTION A CONTRACTOR	NO /77	PRODUCTION			WELL STATUS (Producin	
returned to prd	9/4/98		// (Flowing, gestly), po 40 ring RHAC pump	mping - size and type of pump	,		WHILL STATUS (F /Outlier)	X 01 31114-1117
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N FOR	OIL - BBL.	GAS - MCI	t_	WATER - BBL.	GAS-OIL RATIO
9/9/98	24		TEST PERIOD	73		170	51	
FLOW. TUBING PRESS.	CASING PRESSUR 300	E CALCULATED 24 HR, RATE	OIL - BBL.	GAS - MCF.	WATER - I	BBL.	OIL GRAVITY - API (COR	UR_)
34. DISPOSITION OF GA	S (Sold, used for fuel, Sold, used for fuel					TEST WITNESSED	BY Dave Schreiner	
35. LIST OF ATTACHMI	·····						Dave Sunener	
36. I hereby certify that the	Corogoing and attach	ed information is comp LeOO		mined from all available record			Dat	e 10/1/98

* (See Instructions and Spaces for Additional Data on Reverse Side)

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly or willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

RECEIVED OCT 2 2 1998 07 73 78

	GEOLOGIC MAI
	38.
37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all	drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):

drill-stem, tests, ii	ncluding depth int	erval tested, cushion used, t	drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):	38. GE	GEOLOGIC MARKERS	3RS
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	200	T.	TOP
Ute Tribal 16-07				NAME	MEAS. DEPTH TRUE VERT. DEPTH	TRUE VERT. DEPTH
B10 C05 C6.1 C8.1 D3.3	4479 4786 4902 4984 5198 5238	CONFIDENTIAL				
		5. 5.				
·						
·						

AFE # 41324

DESC 16-07 UTE TRIBAL

NET AUTHORIZED: 0

WELL 1152 UTE TRIBAL 16-07

DIST

COST CENTER 41324 16-07 UTE TRIBAL

DATE: 05/16/97 STATUS: ACTIVE

APPROVAL DATE:

BUDGET YEAR 1997

COST TYPE						
	ACCOUNT DESCRIPTION	ACTUA	LS		REMAINING	AFE
		CURRENT	TO DATE	TOTAL AFE	AMOUNT	-%-
			0 /			
ICC 840 INTANO	GIBLE COMPLETION		70/			
840.030	ICC - LOCATION & ROADS	0 [227 X		227-	
840.050	ICC - COMPLETION RIG	513	12,859 🖁	21,000	8,142	39
840.120	ICC - WATER & WATER HAULING	0	689 🕊	2,000	1,311	66
840.130	ICC - CEMENT & CEMENT SERVICES	0		(12,000	12,000	100
840.140	ICC - LOGGING	0		1,800	1,800	100
840.180	ICC - RENTAL EQUIPMENT	935	3,113 X	5,000	1,887	38
840.190	ICC - TRANSPORTATION	0 .	1,176 🗸	2,500	1,324	53
840.210	ICC - CONTRACT LABOR	0	435 🗸	3,500	3,065	88
840.240	ICC - SUPERVISION	0	1,376 🗸	4,500	3,125	69
840.300	ICC - OVERHEAD	0		1,300	1,100	100
840.310	ICC - HOT OIL TREATMENT	0	954 K	7,000	1,046	52
840.320	ICC - CASING CREWS & SERVICES	0	,	5,000	5,000	100
840.330	ICC - PERFORATING	о о	10,190 √	5,700	4,490-	79-
840.350	ICC - FRACTURING	47	63 A087 ·	58,000	5,087-	9-
840.370	ICC - COMPLETION TESTING	0	150 K	5,000	4,850	97
TOTAL	840 INTANGIBLE COMPLETION	1,494	94,25	129,100	34,846	27
			70	ven to the	wrong AFE	
IDC 830 INTANG	FIBLE DRILLING COST		1871	GA ()	Move	
830.010	IDC - PERMITS & SURVEYS	عر	,	5,000	, 5,000	100
830.030	IDC - LOCATION & ROADS	0	6/9	8,000	7,391	92
830.040	IDC - INSURANCE & BONDS	. 0		400	400	100
830.050	IDC - CASING CREW	0		500	500	100
830.070	IDC - FOOTAGE DRILLING	0		78,447	78,447	100
830.100	IDC - DRILLING MUD	0		6,500	6,500	100
830.120	IDC - WATER & WATER HAULING	0		2 500	2,500	100
830.130	IDC - CEMENT & CEMENT SERVICES	0		4,500	4,500	100
830.140	IDC - OPEN HOLE LOGS	. 0		11 000	11,000	100
830.170	IDC - DRILL STEM TESTING	0		1,500	1,500	100
830.180	IDC - RENTAL EQUIPMENT	0	_	3,500	3,500	100
830.190	IDC - TRANSPORTATION	. 0		2,000	2,000	100
	IDC - CONTRACT LABOR	0		750	750	100
	IDC - SUPERVISION	0		3,300	3,300	100
	IDC - PROFESS'L FEES 3RD PARTY	° /		750	750	100
830.300	IDC - OVERHEAD	0		1,750	1,750	100
	000 TWENTER BRANCE CO.		1			
TOTAL	830 INTANGIBLE DRILLING COST		609	130,397	129,788	100
SE 865 SURFACE	FOULDMENT					
	SE - PUMP UNIT, ENGINE, MOTOR	0	5,060-	21 400	26.460	124
	SE - PUMPS (CHEM, TRIPLEX)	0	X I	1,000	26,460	124
	SE - FLOWLINE & CONNECTORS	0	\ 5 1 6		3 913	48
	SE - TRACELINES, HEATERS, GLYPOT	0	\/39	3,812	3,812	100
	SE - SITE, ROAD, FENCE, GATE	0	V39	6,200	6,161	99 94
	SE - PADS & SKIDS	0	Ĭ	400	6,115	100
	SE - INSTALLATION LABOR	0	/\		100	
	SE - GAS & SALES LINES	0		7,500		100
	SE - INSULATION	0	1.1	380	380	100 25-
	SE - VALVES, FITTINGS, MISC.	0	1/25	5,000	1,228-	2 5 - 86
305.520	or vario, itilings, misc.	v	/ 481	. 3,500	3,016	00
TOTAL.	865 SURFACE EQUIPMENT		2,592	55,692	53,100	95
			e, 37£	55,652	33,100	93

10/21/98

Petroglyph Operating Co., Inc.

Petroglyph Operating Company, Inc.

Elevation: KB 6204

Ute Tribal 16-07 Lease:

GL 6194

API#: 43-013-31854 Property: 50152

AFE/EPE Number:

41324

Location: County, St.:

16 - 5 S - 3 W

Duchesne

UT

9/4/98

Activity Date

\$2,450.00

7 AM SITP 400. SICP 150. Fluid level 300' blow well dn RIH w/ 10 its circ onto plug circ clean. POOH LD plug. PU BHA RIH. PU 2 its check head PU pump & prime. RIH w/ rods. PU polish rod space out fill tbg w/ 3 bbls test 500 psi. Long stroke w/ rig good pump action. Hang on unit. 5:30 SWIFN.

TUBING DETAIL

KB	10.00	10.00
142 jts 2-7/8" 6.5# J55	4487.47	4487.57
B2 TAC	2.85	4500.32
26 jts 2-7/8" 6.5# J55	817.25	5317.57
PSN	1.10	5318.67
1 jt 2-7/8" 6.5# J55	31.09	5349.76
MSN	.75	5350.51
Perf sub	6.10	5356.61
2 jts	61.05	5417.66
Bull plug	.85	5418.51

ROD DETAIL

1-1/2" x 22' polish rod w/ liner

7/8" x 2' pony 7/8" x 4' pony 7/8" x 6' pony 79 - 7/8" x 25' rods 130 - 3/4" x 25' rods

2-1/2" x 1-3/4" x 15 x 15-1/2 x 16 RHAC 40

ring PA

9/2/98

\$2,250.00

7 AM csg 150#. PU ret. Head. RIH tag sand @ 4525'. Clean out to plug @ 4600', 75' of sand. Circ clean, release plug. POOH. LD plug, PU ret. Head. RIH tag sand @ 4780'. Clean out to plug @ 4820', 40' of sand. Circ clean. Release plug & move to & set @ 5150'. Pull up to 4960'. RU swab equipment. Made 14 runs, recovered 152 bbls. Last run was 40% oil cut. Swabbed this level from surface to 2600'. 6 PM SWIFN.

FLUID RECOVERY

Well BLF:

1235

Well BLFR:

326

Well BLFTR: Well % Rec:

909 26%

10/21/98

Petroglyph Operating Co., Inc.

Petroglyph Operating Company, Inc. Operator:

Elevation: KB 6204

Well: Ute Tribal 16-07 Duchesne

GL 6194

County, St.:

UT

Activity Date

9/1/98

\$73,329.00

7 AM spot 250 gal 15% HCl on C5.3 zone. EOT @ 4860'. POOH w/ tbg. RU Schlumberger perf @ 4840-46, 24 holes. Bkdn perfs. Broke @ 2000 psi, 2.3 BPM @ 1800#. RU Halliburton frac C5.3 zone. Flow back 45 bbls in 45 min. PU ret. Head. RIH to 4820'. Circ on to RBP @ 4880' circ clean. Pull up to 4820'. Set plug test to 4500 psi. Spot 6 bbls 15% HCl. EOT @ 4801'. POOH w/ tbg. RU Schlumberger. Perf C5 zone @ 4786-90'. Bkdn perfs broke @ 1800 psi, 3 BPM @ 1400#. RU Halliburton frac C5 zone. RU Schlumberger. Lube in w/ RBP & perf gun set plug @ 4600' test to 3000#. Perf B11 zone @ 4528-32, 16 holes. Spot 14 gal 15% HCl w/ dump bailer. Bkdn perfs broke @ 2200# 3 BPM @ 1400#. RU Halliburton frac B11 zone, 5 min shut-in. Flow back.

STIMULATION

C5.3 4840-46

ZONE

ZONE

TREATMENT

Fluids task:

pad, slurry, flush 2300, 5331, 4796

Volume (gal): Fluid type:

delta frac, delta frac, slick wtr

Proppant:

20/40 & 16/30

Total lbs:

12,500 & 11,500

Ramp range:

1-6 & 6-8

Choke/hrs:

TREATMENT FLOWBACK adj 45 min

TP CP:

1200-0

Flow rate:

1 BPM, 45 bbls

TREATING PRESSURE

Maximum:

2544

5 min:

2122

STIMULATION TREATMENT

C5 4786-90

Fluid type:

pad, slurry, flush 1500, 3760, 4729

Volume (gal): Fluid type:

delta frac, delta frac, slick wtr

Proppant:

20/40 & 16/30

Total lbs:

10,000 & 11,000

Ramp range:

1-6 & 6-8 ppg

TREATING PRESSURE

Maximum:

2531 psi @ 21.3 BPM

Average:

1700 psi @ 20.0 BPM

SHUT-IN PRESSURE

ISIP: 5 min 2240 1894

10 min:

1601

15 min:

1485

STIMULATION

B11 4528-32

TREATMENT

Fluid task:

pad, slurry, flush

Volume (gal):

1500, 3280, 4442

10/21/98

County, St.:

Petroglyph Operating Co., Inc.

Operator: Petroglyph Operating Company, Inc.

Elevation: KB 6204

GL 6194

Ute Tribal 16-07 Duchesne

UT

Activity Date

Fluid type:

delta frac, delta frac, slickwtr

Proppant:

20/40 & 16/30

Total lbs:

10,000 & 11,000

Ramp range:

1-6 & 6-8 ppg

TREATING PRESSURE

Maximum:

2718 psi @ 20.6 BPM

Average:

2350 psi @ 20.0 BPM

TREATMENT FLOWBACK

Choke/hr:

add

TP CP:

1894-0

Flow rate:

1 BPM; 51 bbls

SHUT-IN PRESSURE

ISIP:

2240

5 min:

1894

10 min:

1601

15 min: Displ. Volume: 1485

4442

Fract gradient:

.92

10/21/98

Petroglyph Operating Co., Inc.

Petroglyph Operating Company, Inc. Operator:

Elevation: KB 6204

Well: Ute Tribal 16-07 Duchesne

GL 6194

County, St.:

UT

Activity Date

8/31/98

\$4,591.00

7 AM RU Halliburton frac C8.1 zone. Screened out w/ 55 sxs in csg. RD Halliburton flowback 60 bbls in 1 hr. PU ret. Head. RIH circ to plug @ 5150'. Circ clean release plug pull up to 4970'. Set plug test 4500 psi. Pull up to 4930'. Spot 6 bbls 15% HCl. POOH RU Schlumberger & perfC6.1 zones.. Bkdn perfs broke @ 2400 psi @ 2.5 BPM @ 2000 psi. RU Halliburton frac C6.1 zones. Schlumberger lube in w/ RBP & gun. Tag sand @ 4830'. RD Schlumberger & Halliburton. PU ret. Head. RIH tag sand @ 4830' clean out to plug @ 4570'. Circ clean, release plug pull up to 4880'. Set plug test to 4500 psi. Ready to spot acid. 7:30 SWIFN.

STIMULATION

C8.1 4986-90

TREATMENT

Fluid task:

pad, slurry, flush

Volume (gal):

1500, 4177, 3815

Fluid type: Proppant:

delta, delta, slick wtr

20/40 & 16/30

Total lbs:

10,000 & 11,000

Ramp range:

1-8 ppg

TREATING PRESSURE

Maximum:

4580 psi @ 21.6 BPM

Average:

2350 psi @ 20.5 BPM

TREATMENT FLOWBACK

Choke/hrs:

TP CP:

4580 - 0

Flow rate:

1 BPM, 60 bbls

SHUT-IN PRESSURE

ISIP:

4580

5 min:

3508

Displ. Volume:

4943, short 1128

FLUID RECOVERY

Zone BLF:

Zone BLFR: 120

Zone BLFTR:

362

Zone % Rec:

24%

C6.1 4923-26 & 4902-05

STIMULATION TREATMENT

Fluid task:

pad, slurry, flush

Volume (gal):

1500, 4422, 4842 delta, delta, slickwtr

Fluid type:

20/40 & 16/30

Proppant:

Total lbs:

10,000 & 11,500

Ramp range: 1-8 ppg

TREATING PRESSURE

Maximum:

2635 psi @ 32.4 BPM

Average:

1800 psi @ 30.8 BPM

TREATMENT FLOWBAKC

10/21/98

Petroglyph Operating Co., Inc.

Operator: Petroglyph Operating Company, Inc.

Elevation: KB 6204

GL 6194

Well:

Activity Date

Ute Tribal 16-07

County, St.: Duchesne UT

Daily Cost Activity Description

Choke/hrs:

Adj. 1/2 hr 1800-0

TP CP: Flow rate:

1 BPM, 30 bbls

SHUT-IN PRESSURE

ISIP;

2140

5 min:

1828

Displ. Volume:

4842

Fract. Gradient:

.87

Cumulative Cost:

\$82,620.00

Days Since Start:

5



Form 3160-4 (November 1983) (formerly 9-330)

UNITED STATES DEPARTMENT OF THE INTERIOR

SUBMIT IN DUPLICATE
(See other instruction reverse side)

Form approved.
Budget Bureau No. 1004-0137
(Bupires August 31, 1985)

5. LEASE DESIGNATION AND SERIAL NO. BUREAU OF LAND MANAGEMENT 14-20-H62-3511 6. IF INDIAN, ALOTTEB OR TRIBE NAME WELL COMPLETION OR RECOMPLETION REPORT AND LOG Ute Indian Tribe 7. UNIT AGREEMENT NAME La. TYPE OF WELL: 14-20-H62-4650 B. FARM OR LEASE NAME b. TYPE OF COMPLETION: Ute Indian Tribe Plug Back New Well Workover xx Deepen WELL NO. 2. NAME OF OPERATOR PETROGLYPH OPERATING COMPANY, INC. Ute Tribal 16-07 10. FIELD AND POOL, OR WILDCAT 3. ADDRESS OF OPERATOR P.O. BOX 607, ROOSEVELT, UT 84066 (435) 722 Antelope Creek 11. SEC., T., R., M., OR BLOCK AND 4. LOCATION OF WELL (Report location clearly and in accordance with any State require SURVEY OR AREA 2091' FNL 2094' FEL At surface Sec. 16 -T5S-R3W At top prod. interval reported below 13. State 12. County or Parish Duchesne Utah 43-013-31854 3/25/97 6180 At total depth 18. ELEVATIONS (DF, RKB, RT, GR, ETC.) 19. ELEV. CASINGHEAD 16. DATE T.D. REACHED 17. DATE COMPLETED (Ready to prod.) 15. DATE SPUDDED 6204 9/4/98 5/23/97 CABLE TOOLS 23. INTERVALS ROTARY TOOLS 21. PLUG BACK T.D., MD & TVD 22. IF MULTIPLE COMPL., HOW MANY* 20. TOTAL DEPTH, MD & TVD DRILLLED BY 6104 5 25 WAS DIRECTIONAL SURVEY MADE 24. PRODUCING INTERVAL(S) OF THIS COMPLETION - TOP, BOTTOM, NAME (MD AND TVD)* Green River D3.3, D3.4, C8.1, C6.1, C5.3, C5, B11 27. WAS WELL CORED 26. TYPE ELECTRIC AND OTHER LOGS RUN No Compensated Neutron Litho Density w/ Gamma Ray, AIT CASING RECORD (Report all strings set in well) AMOUNT PULLED CEMENTING RECORD WEIGHT, LB./FT. DEPTH SET (MD) HOLE SIZE CASING SIZE 200 яха Туре 5 8-5/8" 24 270 12-1/4" 7-7/8" 5-1/2" 6150 110 sxs Highfill 15.5 325 sxs Thixotropic TUBING RECORD LINER RECORD PACKER SET (MD) SIZE TOP BOTTOM (MD) SACKS CEMENT* SCREEN (MD) SIZE DEPTH SET (MD) 5350 2-7/8* ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC 31. PERFORATION RECORD (Interval, size and member) DEPTH INTERVAL (MD) AMOUNT AND KIND OF MATERIAL USED CONFIDENTIAL 4986-90 5677 gals Delta frac, 10000# 20/40 prop & 11000# 16/30 prop 5922 gals Delta frac, 10000# 20/40 prop & 11500# 16/30 prop C5 4786-90' (16 holes) 4902-05' - 4923-26' C8.1 4986-90' (16 holes) C6.1 4923-26' (12 holes) B11 4528-32' (16 holes) 4840-46 7631 gals Delta frac, 12500# 20/40 prop & 11500# 16/30 prop C6.1 4902-05' (12 holes) 4786-90 5260 gals Delta frac, 10000# 20/40 prop & 11000# 16/30 prop 4528-32 4780 gals Delta frac, 10000# 20/40 prop & 11000# 16/30 prop C5.3 4840-46' (24 holes) PRODUCTION WELL STATUS (Producing or shut-in) PRODUCTION METHOD (Flowing, gas lift, pumping - size and type of pump) DATE FIRST PRODUCTION 2-1/2" x 1-3/4" x 16' 40 ring RHAC pump returned to prd 9/4/98 GAS-OIL RATIO WATER - BBL. DATE OF TEST HOURS TESTED CHOKE SIZE PROD'N FOR OIL - BBL. GAS - MCF. TEST PERIOD 9/9/98 170 51 24 FLOW. TUBING PRESS. CASING PRESSURE CALCULATED OIL - BBL GAS - MCF. WATER - BBL. OIL GRAVITY - API (CORR.) 24 HR. RATE 300 TEST WITNESSED BY 34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) Sold, used for fuel 35. LIST OF ATTACHMENTS 36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records Operations Coordinator 10/1/98 Title Date

Do not abando SUBMIT 1. Type of Well: SOII Well Gas Well 2. Name of Operator PETRO CONTA EMAIL 3a. Address P.O. BOX 6 ROOSEVE 4. Location of Well (Footage,	UNITED STA' DEPARTMENT OF TH BUREAU OF LAND MA DRY NOTICES AND RE use this form for proposals ned well. Use Form 3160-3 (IN TRIPLICATE Other Other OCT: MICHEAL SAFFORI :: mikes@petroglyph.net 07 LT, UT 84066 Sec., T., R., M., or Survey Descrip VNE 2091FNL 2094FEL	E INTERIOR NAGEMENT PORTS ON V to drill or to re (APD) for such j Instructions MPANY, COORDINAT 3b. Phone TEL: 4 FAX: 4	enter an proposals on reverse si	ı code)	5. Lease Seri 1420H623. 6. If Indian, 2 UTE INDI 7. If Unit or 1420H624 8. Lease Nar UTE TRII 9. API Well 430133185	Allottee or Tribe Name (AN TRIBE CA Agreement, Name and No. 650 ne and Well No. BAL #16-07 No. 64 Pool, or Exploratory PE CREEK Parish, State
12 CVICCV A		PODNINGATE	NATURE Z	NEW COLUMN TO THE	OPT OF	OTHER INATA
TYPE OF SUBMISSION	PPROPRIATE BOX(ES) '	TO INDICATE		OF NOTICE, REP —- OF ACTION	OKI, OK	THER DATA
	Acidize	☐ Deepen	THE	Production (Star	t/Resume) F	Water Shut-off
Notice of Intent	Alter Casing	Fracture Tr	eat	Reclamation		Well Integrity
Subsequent Report	Casing Repair	☐ New Const		Recomplete		WORKOVER OPERATION
_	12 *			☐ Temporarily Aba	andon	
Final Abandonment Notice Convert to Injection Plug Back Water Disposal						
Attach the Bond under which following completion of invitesting has been completed. determined that the site is respectively. The Petroglyph Operating has zones 5239-51', 5197-52' TREATMENT 5239-51' with 714 gallon 5191-95' and 5197-5218' 4986-90, 4923-26', 4902-	h the work will be performed or proved operations. If the operation is Final Abandonment Notices shall ady for final inspection.) as performed an acid job on 18', 5191-95', 4838-48' and 4 is 15% HCL + additives. With 1512 gallons 15% HCL + 1504 gallons 15% HCL + 1515 HCL + 2015 HCL +	rovide the Bond No results in multiple of be filed only after the above refer 1528-34' were re L + additives gallons 15% HC	on file with the ompletion or recall requirements renced well on perforated 4	BLM/BIA. Required completion in a new int, including reclamation 2/3/01. spf 180 deg. phasin	subsequent rep terval, a Form i, have been co	3160-4 shall be filed once
Name (Printed/Typed)			Title			
Signature Date					· · · · · · · · · · · · · · · · · · ·	
The second second	THIS SPACE	FOR FEDERA	L OR STA	TE OFFICE US	E GEORGE	
Approved by			Title			Date
Conditions of approval, if any, a	re attached. Approval of this notice gal or equitable title to thos rights at to conduct operations theron.		r	e		
Title 18 U.S.C. Section 1001 and States any false, fictitious or fra	d Title 43 U.S.C. Section 1212, maudulent statements or representation	ake it a crime for an	y person knowin within its jurisd	gly a grant y a		agency of the United
ELECTRONIC SUBMI	SSION #3167 VERIFIED B NY, SENT TO THE VERNA	Y THE BLM W	ELL INFOR	MATION SYSTEM	7 FOR PET 2 6 2001	ROGLYPH

DIVISION OF OIL, GAS AND MINING

Petroglyph Energy, Inc.

O. Box 1839

Hutchinson KS

67504-1839

Fax: (316) 665-8577 Phone: (316) 665-8500

UTE TRIBAL 16-07

Completion Chronological Report

Well User ID: 1152

Well Name: UTE TRIBAL 16-07

AFE#: 41923

Operator :

PETROGLYPH OPERATING COMPANY

WI: 0

NRI 0

Page 1 of 2

Loc:

STR: 16 -5S - 3W

County: DUCHESNE, UT

APICode: 4301331854

Field: ANTELOPE CREEK

AFE Type: Workover

Contractor:

Spud Date: 5/17/1997

Rig Rel Date:

Total Depth: ()

ft.

Comp Date: 6/19/1997

PBTD: 0

ft.

Completions Detail Report

Date: 2/3/2001

Activity: Fishing

Days On Completion: 1

Rpt Summary:

Report Detail: 10:00 to 12:00 - MIRU - f/ 29-10, rermoved horse head LD polish rod replaced radigan & pump tee. Found rods to

12:30 to 13:00 - Pull rods - Try to screw into rods no luck, POOH w/ rods had broken worn box on btm of 103rd rod

LD rods 100,101, 102, 103, worn.

13:00 to 14:00 - Fish - RIH w/ mouse trap & 4rods to much wax, pumped 35 bbls hot wtr down csg,

14:00 to 15:00 - Fish - Continue RIH w/ mouse trap & rods tag fish unable to latch on.

15:00 to 15:30 - POOH - w/ rods dehydrated wax in tool clean same.

15:30 to 16:00 - Run rods - & mouse trap.

16:00 to 17:00 - Fish - Work rods got on fish 2-times kept pulling off @ 3,000# over POOH w/ rods no fish LD

mouse trap. SWI SDFN.

17:00 to 18:00 - Travel -

Date: 2/5/2001

Activity: POOH

Days On Completion: 3

Rpt Summary:

Report Detail: 06:00 to 07:00 - Travel - Crew travel.

07:00 to 12:00 - POOH - ND wellhead release TA NU BOP and POOH w/ tbg to rods. Unseat pump flush tbg w/ 40

bbls wtr and finish POOH w/ rods and tbg. (LD jt # 167, 168 and 169, 168 had hole).

12:00 to 16:00 - GIH - RIH w/ scraper and tog with SV in place testing tog to 3000 psi. EOT 5432'.

16:00 to 17:00 - Fish - SV and POOH w/ tbg to 4500' SDFD.

17:00 to 18:00 - Travel - Crew travel.

Date: 2/6/2001

Activity: Perforate

Days On Completion: 4

Rpt Summary:

Report Detail: 06:00 to 07:00 - Travel - Crew travel.

07:00 to 10:00 - POOH - w/ tbg and scraper, tally out.

10:00 to 11:00 - MIRU - pump and tank.

11:00 to 17:00 - Perforate - Reperforate D3.4, D3.3,C5.3,C5 and B11 zones.

17:00 to 18:00 - Travel - Crew travel.

Date: 2/7/2001

Activity: Acidize

Days On Completion: 5

Rpt Summary:

Report Detail: 06:00 to 07:00 - Travel - Crew travel.

07:00 to 08:30 - GIH - W/ Bp, Pkr and tbg to 5340'. Set tools and pressure test tbg to 3000 psi.

08:30 to 11:30 - Acidize - Isolate D3.4 and D3.3 and treat w/ 15% HCL.

11:30 to 15:30 - Swab - Move tools and swab D3.4, D3.3 together. Made 10 runs recovered 40 bbls of fluid final PF

was a 3, IFL 1900' FFL 4900' @ SN.

15:30 to 16:30 - Acidize - Move tools isolating C8.1, C6.1 and begin to treat, communication w/ C5.3 occurred.

Moved pkr and treated all three zones together.

16:30 to 18:30 - Acidize - Move tools isolate C5 and treat, move tools isolate B11 and treat.

18:30 to 19:30 - Travel - Crew travel.



Completion Chron Report

AFE#: 41923

Hutchinson KS

67504-1839

Phone: (316) 665-8500 Fax: (316) 665-8577

Page 2 of 2 **Completion Chronological Report UTE TRIBAL 16-07**

Well Name: UTE TRIBAL 16-07 Well User ID: 1152

WI: 0NRI 0 PETROGLYPH OPERATING COMPANY Operator :

STR: 16 -5S -3W Loc:

County: DUCHESNE, UT APICode: 4301331854

Field: ANTELOPE CREEK

Contractor: AFE Type: Workover

Spud Date: 5/17/1997 Rig Rel Date: Total Depth: 0 ft.

Comp Date: 6/19/1997 PBTD: 0 ft.

Date: 2/8/2001 Activity: Swabbing

Days On Completion: 6

Rpt Summary:

Report Detail: 06:00 to 07:00 - Travel - Crew travel.

07:00 to 08:30 - POOH - w/ Bp and Pkr.

08:30 to 11:00 - GIH - w/ production tbg ND BOP set TA in 10,000 tension and NU wellhead.

11:00 to 17:00 - Swab - Made 14 runs recovered 89 bbls fluid,IFL 2700',FFL 4600' with a PH of 6. Cups had a trace

of sand at times.

17:00 to 18:00 - Travel - Crew travel. .

Date: 2/9/2001 Activity: Run tubing and rods Days On Completion: 7

Rpt Summary:

Report Detail: 06:00 to 07:00 - Travel - Crew travel.

07:00 to 09:00 - Swab - Made 2 swab runs, the first was mostly oil the second was dark wtr w/ PH of 6. IFL 3800'

and FFL 4600'.

09:00 to 13:00 - Run rods - Flush tbg w/ 30 bbls wtr, run pump and rods. Fill tbg w/ 20 bbls wtr and test to 1000 psi

13:00 to 15:30 - RDMOL -

(This shows only the perforations for this project or day) **Well Perforation History**

Date	Formation	Perf Status	Upper Perf	Lower Perf	Sht / Ft	Description:	
2/6/2001	B11	Open	4528	4534	4		
2/6/2001	C5	Open	4770	4776	4		10.02
2/6/2001	C5.3	Open	4838	4848	4		
2/6/2001	D3.3	Open	5191	5195	4		
2/6/2001	D3.3	Open	5197	5218	4		
2/6/2001	D3.4	Open	5239	5251	4		

P. 02

STATE OF UTAH DEFARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

FORM 6

ENTITY	

Operator:

Petroplyon Operating Co.

Operator Account Number: N 3800

Address:

P.O. 858 60/ Brose velt UT. 84066

Phone Number: 435-722-253

Nell 1 API Number	ber Well Name		QQ	Sec	Twp	Rng	County	
43-013-32488	HeTribal	16-05F	5WW	16	53	3W	Duchesne	
Action Gode	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date			
C	12083	12246				mo	14-2004	
Comments:	(GRRI)						06/3/04	

Well is now on the 16-02 Tank Battery.

Well 2	As in h		J (ob.)	Sec	Twb	Rng."	County
API Number	:Well.I	lame	90	Gou:	1446	1414	
43-613-31854	UtcTribal	16-07	PW E	16	55	3W	Duchesne
Action Code	Current Entity Number	New Entity Number		Spud Da	le .	En	ity Assignment Heative Date
C	12083	12246				ma	4-2004
Comments:		GRRV					4/3/04
I Well is	now on t	he 16-02	Tank	Ba	Hery		
L CON IC					J		

API Number	Well Name	ĠΩ,	Sec Twp	Rng	County
Action Dede	Current Entity New Entity Number		Spud Date	En	ility Assignment Effective Date
Comments:					

ACTION CODES:

- A Establish new entity for new well (single well only)
- B Add new well to existing emity (group or unit well)
- C . Re-sessign well from one extelling entity to another existing entity
- D Re-assign well from one existing entity to a new entity
- E Other (Explain in 'comments' section)

Name (Money Production Asst. 6-3-04)
Title RECEIVED

(62000)

JUN 0 3 2004

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

55 3W fee.16 4301331854

REGION 8
999 18TH STREET - SUITE 300
DENVER, CO 80202-2466
Phone 800-227-8917
http://www.epa.gov/region08
OCT 1 8 2005

Ref: 8P-W-GW

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Steve Wall, District Manager Petroglyph Energy, Inc. 4116 West 3000 So. Ioka Lane Roosevelt, UT 84066 Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY

RE:

Additional Well to Antelope Creek Area Permit

UIC Permit No. UT20736-00000

Well ID: UT20736-06603

Ute Tribal No.16-07, Duchesne County, Utah

Dear Mr. Wall:

The Petroglyph Operating Company, Inc. (Petroglyph) request to convert the former Green River Formation oil well Ute Tribal No.16-07 to an enhanced recovery injection well in the Antelope Creek Waterflood project is hereby authorized by the Environmental Protection Agency (EPA) under the terms and conditions of the Authorization For Additional Well.

The addition of the proposed injection well, within the exterior boundary of the Uintah & Ouray Indian Reservation, is being made under the authority of 40 CFR §144.33 (c) and terms of the Antelope Creek Waterflood UIC Area Permit No. UT20736-00000. Unless specifically mentioned in the enclosed Authorization For Additional Well, the Ute Tribal No.16-07 is subject to all terms and conditions of the UIC Area Permit UT20736-00000 as modified.

Please be aware that Petroglyph does not have authorization to begin injection operations into the well until all <u>Prior to Commencing Injection</u> requirements have been submitted and evaluated by the EPA, and Petroglyph has received written authorization from the Director to begin injection.

Prior to receiving authorization to inject, the EPA requires that Petroglyph submit for review and approval the following: (1) the results of a Part I (Internal) mechanical integrity test (MIT), (2) a pore pressure calculation of the injection interval, (3) a completed EPA Form RECEIVED

CCT 2 4 2005

No. 7520-12 Well Rework Record.

The initial Maximum Allowable Injection Pressure (MAIP) for the Ute Tribal No.16-07 was determined to be <u>1658 psig.</u> UIC Area Permit UT20736-00000 also provides the opportunity for the permittee to request a change in the MAIP based upon results of a step rate test that demonstrates that the formation breakdown pressure will not be exceeded.

If you have any questions, please call Ms. Patricia Pfeiffer at (303) 312-6271 or 1.800.227.8917 (Ext. 6271). Please submit the required data to <u>ATTENTION: PATRICIA</u> <u>PFEIFFER</u>, at the letterhead address, citing <u>MAIL CODE</u>: <u>8P-W-GW</u> very prominently.

Sincerely,

Then Mayle for Stephen S. Tuber

Assistant Regional Administrator

Office of Partnerships and Regulatory Assistance

encl: Authorization For Conversion of An Additional Well EPA Form No. 7520-12 (Well Rework Record)

cc: without enclosures

Maxine Natchees, Chairperson Uintah & Ouray Business Committee Ute Indian Tribe P.O. Box 190 Fort Duchesne, UT 84026

Chester Mills, Superintendent BIA - Uintah & Ouray Indian Agency P.O. Box 130 Fort Duchesne, UT 84026

cc: with enclosures

Mr. Kenneth Smith
Executive Vice President and Chief Operating Officer
Petroglyph Energy, Inc.
555 S. Cole Blvd
Boise, ID 83709

Elaine Willie Environmental Coordinator Ute Indian Tribe P.O. Box 460 Fort Duchesne, UT 84026

Gil Hunt Technical Services Manager Utah Division of Oil, Gas, and Mining 1594 West North Temple - Suite 1220 Salt Lake City, UT 84114-5801

Kirk Fleetwood, PE BLM - Vernal District 170 South 500 East Vernal, UT 84078



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8 999 18TH STREET - SUITE 300 **DENVER, CO 80202-2466** Phone 800-227-8917 http://www.epa.gov/region08

AUTHORIZATION FOR ADDITIONAL WELL

UIC Area Permit No: UT20736-00000

The Antelope Creek Waterflood Final UIC Area Permit No. UT20736-00000, effective July 12, 1994, authorizes injection for the purpose of enhanced oil recovery into multiple lenticular sand units which are distributed throughout the lower portion of the Green River Formation. On May 8, 2000, the permittee provided notice to the Director concerning the following additional enhanced recovery injection well:

Well Name:

EPA Well ID Number:

Location:

Ute Tribal 16-07

UT20736-06603

2091 ft FNL & 2094 ft FEL SW NE Sec. 16 - T5S - R3W

Duchesne County, Utah.

Pursuant to 40 CFR §144.33, Area UIC Permit No. UT20736-00000 authorizes the permittee to construct and operate, convert, or plug and abandon additional enhanced recovery injection wells within the area permit. This well was determined to satisfy additional well criteria required by the permit.

This well is subject to all provisions of UIC Area Permit No. UT20736-00000, as modified and as specified in the Well Specific Requirements detailed below. This Authorization shall expire one year after the Effective Date unless the permittee has converted the well to injection or submits a written request to extend this Authorization prior to the expiration date.

This Authorization is effective upon signature.

DIV. OF OIL, GAS & MINING

Date: 10-14-05

Stephen S. Tuber *Assistant Regional Administrator

Office of Partnerships and Regulatory Assistance

* The person holding this title is referred to as the Director throughout the Permit and Authorization

WELL-SPECIFIC REQUIREMENTS

Well Name:

Ute Tribal 16-07

EPA Well ID Number: UT20736-06603

Prior to commencing injection operations, the permittee shall submit the following information and receive written Authority to Inject from the Director:

- a successful Part I (Internal) Mechanical Integrity test (MIT); 1.
- pore pressure calculation of the proposed injection zone; and 2.
- completed Well Rework Record EPA Form No. 7520-12 and schematic diagram. 3.

Approved Injection Zone: Injection is approved between the base of the Green River A Lime Marker, at approximately 4070 ft, to the top of the Basal Carbonate, at approximately 6020 ft.

Maximum Allowable Injection Pressure (MAIP): The initial MAIP is 1658 psig, based on the following calculation:

> MAIP = [FG - (0.433)(SG)] * D, where FG = 0.80 psi/ftSG = 1.002D = 4528 ft (top perforation depth KB) MAIP = 1658 psi

UIC Area Permit No. UT20736-00000 also provides the opportunity for the permittee to request a change of the MAIP based upon results of a step rate test that demonstrates the formation breakdown pressure will not be exceeded.

Well Construction and Corrective Action: The following Corrective Action is required. Based on the review of well construction and the cement bond log, well construction may not prevent significant fluid movement through vertical channels adjacent to the injection well bore, Part II (External) Mechanical Integrity (Part II MI), pursuant to standards of REGION 8 GROUND WATER SECTION GUIDANCE No. 34 "Cement Bond Logging Techniques and Interpretation." Therefore the operator shall demonstrate Part II MI prior to commencing injection and at least once every five years thereafter using a temperature survey, noise log, oxygen activation log, or a radioactive tracer survey under certain circumstances. If necessary, the Director may authorize a limited period for injection prior to the test to allow for stabilization of the injection formation prior to the test.

Tubing 2-3/8" or similar size injection tubing is approved; the packer shall be set at and Packer: a depth no more than 100 ft above the top perforation.

Corrective Action for Wells in Area of Review: No Corrective Action is required. The following wells that penetrate the confining zone are within or proximate to a 1/4 mile radius around the Ute Tribal No. 16-07 were evaluated to determine if any corrective action is necessary to prevent fluid movement into USDWs:

Well: Ute Tribal No. 16-06

Location:

SE NW Sec. 16 - T5S - R3W

Well: Ute Tribal No. 16-08

Location:

SE NE Sec. 16 - T5S - R3W

<u>Demonstration of Mechanical Integrity</u>: A successful demonstration of Part I (Internal) Mechanical Integrity using a standard Casing-Tubing pressure test is required prior to injection and at least once every five years thereafter. EPA reviewed the cement bond log and determined the cement may not provide an effective barrier to significant upward movement of fluids through vertical channels adjacent to the well bore pursuant to 40 CFR 146.8 (a)(2). Therefore, further demonstration of Part II (External) Mechanical Integrity is required at this time.

<u>Demonstration of Financial Responsibility:</u> The applicant has demonstrated financial responsibility via a Surety Bond that has been reviewed and approved by the EPA.

Plugging and Abandonment: The well shall be plugged in a manner that isolates the injection zone and prevents movement of fluids into or between USDWs. Tubing, packers, and any downhole apparatus shall be removed. Class A, C, G, and H cements, with additives such as accelerators and retarders that control or enhance cement properties, may be used for plugs; however, volume extending additives and gel cements are not approved for plug use. Plug placement shall be verified by tagging. Plugging gel of at least 9.2 lb/gal shall be placed between all plugs. A minimum 50 ft surface plug shall be set inside and outside of the surface casing to seal pathways for fluid migration into the subsurface. Within sixty (60) days after plugging the owner or operator shall submit Plugging Record (EPA Form 7520-13) to the Director. The Plugging Record must be certified as accurate and complete by the person responsible for the plugging operation. At a minimum, the following plugs are required:

- PLUG NO. 1: Set a cast iron bridge plug (CIBP) no more than 50 ft above the top perforation at 4528 ft with a minimum 20 ft cement plug on top of the CIBP.
- PLUG NO. 2: Set a minimum 210 ft cement plug inside of the 5-1/2" casing across the Trona Zone and the Mahogany Shale, between approximately 2840 ft to 3050 ft.
- PLUG NO. 3: Set a minimum 200 ft cement plug inside of the 5-1/2" casing across the Green River, between approximately 1568 ft to 1768 ft.
- PLUG NO. 4: Set a minimum 200 ft cement plug on the backside of the 5-1/2" casing, across the Green River, between approximately 1568 ft to 1768 ft.
- PLUG NO. 5: Set a minimum 50 ft cement plug on the backside of the 5-1/2" casing, across the surface casing shoe at 270 ft (unless pre-existing backside cement precludes cement-squeezing this interval.)
- PLUG NO. 6: Set a cement plug inside of the 5-1/2" casing, from at least 295 ft to 245 ft.
- PLUG NO. 7: Set a cement plug on the backside of the 5-1/2" casing, from surface to a depth of at least 50 ft.
- PLUG NO. 8: Set a cement plug inside of the 5-1/2" casing from surface to a depth of at least 50 ft.

Cut off surface and 5-1/2" casing at least 4 ft below ground level and set P&A marker; submit Sundry Notices and all necessary data as required by the EPA and other regulatory agencies.

Reporting of Noncompliance:

- (a) Anticipated Noncompliance. The operator shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- (b) <u>Compliance Schedules</u>. Reports of compliance or noncompliance with, or any progress on, interim and final requirements contained in any compliance schedule of this Permit shall be submitted no later than thirty (30) days following each schedule date.
- (c) Written Notice of any noncompliance which may endanger health or the environment shall be reported to the Director within five (5) days of the time the operator becomes aware of the noncompliance. The written notice shall contain a description of the noncompliance and its cause; the period of noncompliance including dates and times; if the noncompliance has not been corrected the anticipated time it is expected to continue; and steps taken or planned to prevent or reduce recurrence of the noncompliance.

Twenty-Four Hour Noncompliance Reporting:

The operator shall report to the Director any noncompliance which may endanger health or environment. Information shall be provided, either orally or by leaving a message, within twenty-four (24) hours from the time the operator becomes aware of the circumstances by telephoning 1.800.227-8917 and asking for the EPA Region 8 UIC Program Compliance and Enforcement Director, or by contacting the Region 8 Emergency Operations Center at 303.293.1788 if calling from outside EPA Region 8. The following information shall be included in the verbal report:

- (a) Any monitoring or other information which indicates that any contaminant may cause an endangerment to a USDW.
- (b) Any noncompliance with a Permit condition or malfunction of the injection system which may cause fluid migration into or between underground sources of drinking water.

Oil Spill and Chemical Release Reporting:

The operator shall comply with all other reporting requirements related to oil spills and chemical releases or other potential impacts to human health or the environment by contacting the National Response Center (NRC) 1.800.424.8802 or 202.267.2675, or through the NRC website at http://www.nrc.useg.mil/index.htm.

Other Noncompliance:

The operator shall report all other instances of noncompliance not otherwise reported at the time monitoring reports are submitted.

Other Information:

Where the operator becomes aware that he failed to submit any relevant facts in the Permit application, or submitted incorrect information in a Permit application, or in any report to the Director, the operator shall submit such correct facts or information within two (2) weeks of the time such information became known to him.

WELL-SPECIFIC CONSIDERATIONS

Well Name: <u>Ute Tribal 16-07</u> EPA Well ID Number: <u>UT20736-00000</u>

Underground Sources of Drinking Water (USDWs): USDWs in the Antelope Creek Waterflood area generally may occur within the Uinta Formation, which extends from the surface to the top of the Green River Formation at approximately 1700 ft. According to "Base of Moderately Saline Ground Water in the Uinta Basin, Utah, State of Utah Technical Publication No. 92," the base of moderately saline ground water may be found at approximately 88 ft below ground surface at this well location. Petroglyph Energy, Inc. provided documentation stating that the base of the USDW was found at 1230 ft KB. Based on analysis of the submitted cement bond log (CBL) the top of casing cement in this well is at approximately ft (KB).

<u>Confining Zone</u>: The Confining Zone at this location is approximately 206 ft of interbedded limestone and shale between the depths of 3850 ft to 4070 ft (KB) which directly overlies the Injection Zone, based on correlation to the Antelope Creek Ute Tribal 04-03 well Type Log. Additional impermeable lacustrine shale beds above the Confining Zone provide for further protection for any overlying USDW.

<u>Injection Zone</u>: The Injection Zone at this well location is an approximately 1989 ft section of multiple lenticular sand units interbedded with shale, marlstone and limestone from the base of the Confining Zone at 4070 ft (KB) to the top of the Basal Carbonate Formation at 6020 ft (KB), based on correlation to the Antelope Creek Ute Tribal 04-03 well Type Log.

<u>Well Construction:</u> The CBL shows only 65% pipe amplitude bond through and beyond the confining zone.

<u>Surface</u>

8-5/8" casing is set at 270 ft (KB) in a 12-1/4" hole, using 200 sacks cement

casing:

casing:

circulated to the surface.

Longstring

5-1/2" casing is set at 6180 ft (KB) in a 7-7/8" 6180 ft Total Depth hole with a plugged back total depth (PBTD) of 6080 ft, cemented with 435 sacks cement.

Top of Cement (TOC): 1085 ft (KB) CBL.

Perforations:

top perforation: 4528 ft

Bottom perforation: 5251 ft

Wells in Area of Review (AOR): Construction and cementing records, including cement bond logs (CBL) as available, for two wells in the 1/4 mile AOR that penetrated the confining zone were reviewed and found adequate to prevent fluid movement out of the injection zone and into USDWs.

Well: Ute Tribal No. 16-06 • Well: Ute Tribal No. 16-08 •

Casing Cement top: 3144 ft (CBL) Casing Cement top: 2408 ft (CBL)

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OU. CAS AND MINING

DIVISION OF OIL, GAS AND MINING				5. LEASE DESIGNATION AND SERIAL NUMBER: 14-20-H62-3511		
SUNDRY NOTICES AND REPORTS ON WELLS			6. IF INDIAN, ALLOTTEE OR TRIBE NAME:			
				Ute Indian Tribe		
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.			7. UNIT OF CA AGREEM 14-20-H62-465			
1. TYPE OF WELL OIL WELL	GAS WELL OTHER	Water Injectio	n Conversion		8. WELL NAME and NUMBER: Ute Tribal 16-07	
2. NAME OF OPERATOR:			V	9. API NUMBER:		
Petroglyph Operating Con	npany Inc.			4301331854		
3. ADDRESS OF OPERATOR: P.O. Box 607	3. ADDRESS OF OPERATOR: P.O. Box 607 Roosevelt UT 118 84066 PHONE NUMBER: (435) 722-2531				10. FIELD AND POOL, OR WILDCAT: Antelope Creek	
4. LOCATION OF WELL	, 51.7 L , 17.			_		
FOOTAGES AT SURFACE: 2091'	FNL 2094' FEL			COUNTY: Duches	ne	
QTR/QTR, SECTION, TOWNSHIP, RAN-	GE, MERIDIAN: SWNE 16 T5S F	R3W		STATE:		
					ЛАН	
11. CHECK APPE	ROPRIATE BOXES TO INDICAT	TE NATURE (OF NOTICE, REPO	ORT, OR OTHER	DATA	
TYPE OF SUBMISSION		TY	PE OF ACTION			
NOTICE OF INTENT	ACIDIZE	DEEPEN		REPERFORATE	CURRENT FORMATION	
(Submit in Duplicate)	ALTER CASING	FRACTURE	TREAT	SIDETRACK TO	REPAIR WELL	
Approximate date work will start:	CASING REPAIR	NEW CONST	RUCTION	TEMPORARILY	ABANDON	
	CHANGE TO PREVIOUS PLANS	OPERATOR	CHANGE	TUBING REPAIR	₹	
	CHANGE TUBING	PLUG AND A		☐ VENT OR FLAR		
SUBSEQUENT REPORT	CHANGE WELL NAME	PLUG BACK	O 111D 014			
(Submit Original Form Only)				WATER DISPOS		
Date of work completion:	CHANGE WELL STATUS	PRODUCTIO	N (START/RESUME)	WATER SHUT-C	OFF	
	COMMINGLE PRODUCING FORMATIONS	RECLAMATIO	ON OF WELL SITE	OTHER:		
	CONVERT WELL TYPE	RECOMPLET	E - DIFFERENT FORMATION			
12. DESCRIBE PROPOSED OR CO	OMPLETED OPERATIONS. Clearly show all p	pertinent details inc	uding dates, depths, volun	nes, etc.		
This sundry is serving noti	ice that Petroglyph Operating Co	mpany Inc. (POCI) plans to con	vert the Ute Tribal	16-07 to an	
injection well from a produ	icing well. This work is being per	rformed under	our area UIC perm	nit number UT207	36-00000. POCI	
	perform the conversion on the Ut					
16-07 is complete, POCI v	vill submit the necessary informa	tion to the EP	A to obtain approv	al to being injectio	n operations.	
		A				
		Accept	ed by the			
		Otan D	vision of			
Oil, Gas and Mining						
FOR RECORD ONLY						
			OILD OILL			
			_			
NAME (DI EACE DOINTS	Stour WING		man in	- 0		
NAME (PLEASE PRINT) STOVE WALL TITLE MANGER						
SIGNATURE DATE 12: 27-05						

(This space for State use only)

STATE OF UTAH

!	DEPARTMENT OF NATURAL RESOU	RCES		
C	5. LEASE DESIGNATION AND SERIAL NUMBER:			
SUNDRY	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute Indian Tribe			
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to			7. UNIT OF CA AGREEMENT NAME:	
drill horizontal late	erals. Use APPLICATION FOR PERMIT TO DRILL	form for such proposals. Water Injection Conversion	14-20-H62-4650 8. WELL NAME and NUMBER:	
OIL WELL	Ute Tribal 16-07			
2. NAME OF OPERATOR:	nony Inc	-	9. API NUMBER: 4301331854	
Petroglyph Operating Com 3. ADDRESS OF OPERATOR:	pany inc.	PHONE NUMBER:	10. FIELD AND POOL, OR WILDCAT:	
P.O. Box 607	Roosevelt STATE UT	84066 (435) 722-2531	Antelope Creek	
4. LOCATION OF WELL				
FOOTAGES AT SURFACE: 2091' F	NL 2094' FEL		COUNTY: Duchesne	
QTR/QTR, SECTION, TOWNSHIP, RANG	BE, MERIDIAN: SWNE 16 T5S F	R3W	STATE: UTAH	
11. CHECK APPR	OPRIATE BOXES TO INDICAT	TE NATURE OF NOTICE, REPO	RT, OR OTHER DATA	
TYPE OF SUBMISSION		TYPE OF ACTION		
NOTICE OF INTENT	ACIDIZE	DEEPEN	REPERFORATE CURRENT FORMATION	
(Submit in Duplicate)	ALTER CASING	FRACTURE TREAT	SIDETRACK TO REPAIR WELL	
Approximate date work will start:	CASING REPAIR	NEW CONSTRUCTION	TEMPORARILY ABANDON	
	CHANGE TO PREVIOUS PLANS	OPERATOR CHANGE	TUBING REPAIR	
	CHANGE TUBING	PLUG AND ABANDON	VENT OR FLARE	
SUBSEQUENT REPORT (Submit Original Form Only)	CHANGE WELL NAME	PLUG BACK	WATER DISPOSAL	
Date of work completion:	CHANGE WELL STATUS	PRODUCTION (START/RESUME)	WATER SHUT-OFF	
·	COMMINGLE PRODUCING FORMATIONS	RECLAMATION OF WELL SITE	OTHER:	
	CONVERT WELL TYPE	RECOMPLETE - DIFFERENT FORMATION		
This well has been converted to a water injection well to support the ongoing secondary waterflood currently active in Antelope Creek. The rods and tubing have been pulled from this well. The injection string consists of 2 3/8" 4.6#, J-55 EUE tubing. The packer is installed @ 4475' +/- KB. The packer fluid has been circulated on the backside and a successful MIT test performed and submitted to the EPA. POCI also added the following perforations: C6 4952' - 4954', C5 4776' - 4783', C4 4747' - 4752' with 4" guns, 25 grams and 47" penetration, .41 dia shot, and 4 spf. Accepted by the Utah Division of FOR RECORD ONLY				
AV	eve Wall	TITLE		
SIGNATURE XICUV MUM DATE 7 03 06				
This space for State use only)			RECEIVED	

DIV. OF OIL, GAS & MINING

JAN 0 9 2006



UIJITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8

999 18TH STREET - SUITE 200 DENVER, CO 80202-2466 Phone 800-227-8917 http://www.epa.gov/region08

JAN 13 2006

JAN 2 3 2006

CIV CTCL, GA

Ref: 8P-W-GW

<u>CERTIFIED MAIL</u>
RETURN RECEIPT REQUESTED

Steve Wall, District Manager Petroglyph Energy, Inc. 4116 West 3000 So. Ioka Lane Roosevelt, UT 84066 Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY

43.013.31854

RE:

Authorization to Inject
Ute Tubal 16-07

UIC Permit UT20736-06603

Antelope Creek Field, Duchesne County, Utah

Dear Mr. Wall:

Thank you for submitting information pertaining to the newly constructed or converted Ute Tribal 16-07 enhanced recovery injection well to the Region 8 Ground Water Program office of the Environmental Protection Agency (EPA). The "Prior To Commencing Injection" requirements for the Ute Tribal 16-07 injection well required well owner and operator Petroglyph Energy, Inc. to submit the following information to the Director:

- 1. A successful mechanical integrity test (MIT) demonstrating Part I Internal MI,
- 2. Pore pressure calculation of the proposed injection zone, and
- 3. completed EPA Form No. 7520-12.

All required information has been submitted, and has been reviewed and approved by the EPA. Therefore, effective upon your receipt of this letter, Administrative approval hereby is granted for injection into the Ute Tribal 16-07 enhanced recovery injection well under the conditions of the Authorization for Additional Well and UIC Area Permit UT20736-00000 as modified.

As of this approval, responsibility for permit compliance and enforcement is transferred to the Region 8 UIC Technical Enforcement Program office. Therefore, please direct all future notification, reporting, monitoring and compliance correspondence to the following address, referencing your well and UIC Permit number on all correspondence regarding this well.

Technical Enforcement Program - UIC
U.S. EPA Region 8, Mail Code 8ENF-UFO
999 18th Street, Suite 300
Denver, Colorado 80202-2466

The Director has determined that the maximum allowable surface injection pressure (MAIP) for the Ute Tribal 16-07 is 1658 psig. Please be reminded that it is the responsibility of the owner/operator to be aware of, and to comply with, all conditions of Authorization for Additional Well UT20736-06603 and EPA UIC Area Permit UT20736-00000 and relevant modifications as issued.

If you have any questions regarding this Authorization, please call Patricia Pfeiffer of my staff at (303) 312-6271. For questions regarding notification, testing, monitoring, reporting or other Permit requirements, the UIC Technical Enforcement Program may be reached by calling (800) 227-8917.

Sincerely,

Tracy M. Eagle

Director

Ground Water Program

Many M Taple

cc: Maxine Natchees, Acting Chairperson
Uintah & Ouray Business Committee
Ute Indian Tribe
P.O. Box 190
Fort Duchesne, UT 84026

Chester Mills, Superintendent BIA - Uintah & Ouray Indian Agency P.O. Box 130 Fort Duchesne, UT 84026

Mr. Kenneth Smith
Executive Vice President and Chief Operating Officer
Petroglyph Energy, Inc.
555 S. Cole Blvd
Boise, ID 83709

S. Elaine Willie Environmental Coordinator Ute Indian Tribe P.O. Box 460 Fort Duchesne, UT 84026

Gil Hunt Technical Services Manager Utah Division of Oil, Gas, and Mining 1594 West North Temple - Suite 1220 Salt Lake City, UT 84114-5801

BLM - Vernal District 170 South 500 East Vernal, UT 84078

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OU. CAS AND MINING

	DEPARIMENT OF NATURAL RESOUR	RCES		
	5. LEASE DESIGNATION AND SERIAL NUMBER: 14-20-H62-3511			
SUNDRY	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute Indian Tribe			
Do not use this form for proposals to drill n	7. UNIT OF CA AGREEMENT NAME: 14-20-H62-4650			
1. TYPE OF WELL OIL WELL GAS WELL OTHER Water Injection Conversion			8. WELL NAME and NUMBER: Ute Tribal 16-07	
2. NAME OF OPERATOR:			9. API NUMBER:	
Petroglyph Operating C	ompany inc.		4301331854	
3. ADDRESS OF OPERATOR: P.O. Box 607	10. FIELD AND POOL, OR WILDCAT: Antelope Creek			
4. LOCATION OF WELL	ENIL 2004' EEL		Duchana	
FOOTAGES AT SURFACE: 2091'	FNL 2094 FEL		COUNTY: Duchesne	
QTR/QTR, SECTION, TOWNSHIP, RAN	IGE, MERIDIAN: SWNE 16 T5S F	R3W	STATE: UTAH	
11. CHECK APPI	ROPRIATE BOXES TO INDICAT	E NATURE OF NOTICE, REPO	RT, OR OTHER DATA	
TYPE OF SUBMISSION		TYPE OF ACTION		
NOTICE OF INTENT	ACIDIZE	DEEPEN	REPERFORATE CURRENT FORMATION	
(Submit in Duplicate)	ALTER CASING	FRACTURE TREAT	SIDETRACK TO REPAIR WELL	
Approximate date work will start:	CASING REPAIR	NEW CONSTRUCTION	TEMPORARILY ABANDON	
	CHANGE TO PREVIOUS PLANS	OPERATOR CHANGE	TUBING REPAIR	
	CHANGE TUBING	PLUG AND ABANDON	VENT OR FLARE	
SUBSEQUENT REPORT (Submit Original Form Only)	CHANGE WELL NAME	PLUG BACK	WATER DISPOSAL	
Date of work completion:	CHANGE WELL STATUS	PRODUCTION (START/RESUME)	WATER SHUT-OFF	
Date of work completion.	COMMINGLE PRODUCING FORMATIONS	RECLAMATION OF WELL SITE	OTHER:	
	CONVERT WELL TYPE	RECOMPLETE - DIFFERENT FORMATION		
12. DESCRIBE PROPOSED OR CO	OMPLETED OPERATIONS. Clearly show all p	pertinent details including dates, depths, volume	es. etc.	
First date of injection Janu	Jany 25, 2006			
r not date of injustion bank	lary 20, 2000			
	ccepted by the			
	tah Division o			
	Die Gas and Minin	ic.		
July 1995 CHU STILL STIL				
FOR RECORD ONLY				
· /				
NAME (PLEASE PRINT)	eve plain	TITLE		
SIGNATURE	Stuf Wall	TITLE	06	
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space to the date day;				

JAN 3 0 2006

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL GAS AND MINING

	DIVISION OF OIL, GAS AND MII			5. LEASE DESIGNATION AND SERIAL NUMBER:	
DIVISION OF OIL, GAS AND MINNING				14-20-H62-3511	
SUNDRY NOTICES AND REPORTS ON WELLS			6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Ute Indian Tribe		
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.			7. UNIT OF CA AGREEMENT NAME: 14-20-H62-4650		
1. TYPE OF WELL OIL WELL GAS WELL OTHER Water Injection Conversion				8. WELL NAME and NUMBER: Ute Tribal 16-07	
NAME OF OPERATOR: Petroglyph Operating Com	anany Inc			9. API NUMBER: 4301331854	
3. ADDRESS OF OPERATOR:		I	PHONE NUMBER:	10. FIELD AND POOL, OR WILDCAT:	
P.O. Box 607	Roosevelt STATE UT ZIP	84066	(435) 722-2531	Antelope Creek	
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2091' FNL 2094' FEL COUNTY: Duchesne					
QTR/QTR, SECTION, TOWNSHIP, RANG	GE, MERIDIAN: SWNE 16 T5S R	R3W		STATE: UTAH	
11. CHECK APPR	ROPRIATE BOXES TO INDICAT	E NATURE (OF NOTICE, REPO	ORT, OR OTHER DATA	
TYPE OF SUBMISSION		TY	PE OF ACTION		
NOTICE OF INTENT	ACIDIZE	DEEPEN		REPERFORATE CURRENT FORMATION	
(Submit in Duplicate)	ALTER CASING	FRACTURE	TREAT	SIDETRACK TO REPAIR WELL	
Approximate date work will start:	CASING REPAIR	NEW CONST	TRUCTION	TEMPORARILY ABANDON	
	CHANGE TO PREVIOUS PLANS	OPERATOR	CHANGE	TUBING REPAIR	
	CHANGE TUBING	PLUG AND A	ABANDON	VENT OR FLARE	
SUBSEQUENT REPORT (Submit Original Form Only)	CHANGE WELL NAME	PLUG BACK		WATER DISPOSAL	
Date of work completion:	CHANGE WELL STATUS	PRODUCTIO	ON (START/RESUME)	WATER SHUT-OFF	
	COMMINGLE PRODUCING FORMATIONS	RECLAMATI	ON OF WELL SITE	OTHER:	
	CONVERT WELL TYPE	RECOMPLET	TE - DIFFERENT FORMATION		
DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. This well has been converted to a water injection well to support the ongoing secondary waterflood currently active in Antelope Creek. The rods and tubing have been pulled from this well. The injection string consists of 2 3/8" 4.6#, J-55 EUE tubing. The packer is installed @ 4475' +/- KB. The packer fluid has been circulated on the backside and a successful MIT test performed and submitted to the EPA. POCI also added the following perforations: C6 4952' - 4954', C5 4776' - 4783', C4 4747' - 4752' with 4" guns, 25 grams and 47" penetration, .41 dia shot, and 4 spf.					
NAME (PLEASE PRINT) 54	eve WALL	пти	MANNS	·	
SIGNATURE SIGNATURE	eve Wall Lilvel	DATE	= <u> MANAG</u> = <u> 1 - 03 - 0</u>	06	

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JAN 3 0 2006



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8
999 18TH STREET - SUITE 200
DENVER, CO 80202-2466
Phone 800-227-8917
http://www.epa.gov/region08

AN 13 2006

Ref: 8P-W-GW

<u>CERTIFIED MAIL</u> <u>RETURN RECEIPT REQUESTED</u>

Steve Wall, District Manager Petroglyph Energy, Inc. 4116 West 3000 So. Ioka Lane Roosevelt, UT 84066

RE:

Authorization to Inject

Ute Tribal 16-07

<u>UIC Permit UT20736-06603</u>

Antelope Creek Field, Duchesne County, Utah

Dear Mr. Wall:

Thank you for submitting information pertaining to the newly constructed or converted Ute Tribal 16-07 enhanced recovery injection well to the Region 8 Ground Water Program office of the Environmental Protection Agency (EPA). The "Prior To Commencing Injection" requirements for the Ute Tribal 16-07 injection well required well owner and operator Petroglyph Energy, Inc. to submit the following information to the Director:

- 1. A successful mechanical integrity test (MIT) demonstrating Part I Internal MI,
- 2. Pore pressure calculation of the proposed injection zone, and
- 3. completed EPA Form No. 7520-12.

All required information has been submitted, and has been reviewed and approved by the EPA. Therefore, effective upon your receipt of this letter, Administrative approval hereby is granted for injection into the Ute Tribal 16-07 enhanced recovery injection well under the conditions of the Authorization for Additional Well and UIC Area Permit UT20736-00000 as modified.

As of this approval, responsibility for permit compliance and enforcement is transferred to the Region 8 UIC Technical Enforcement Program office. Therefore, please direct all future notification, reporting, monitoring and compliance correspondence to the following address, referencing your well and UIC Permit number on all correspondence regarding this well.

Technical Enforcement Program - UIC U.S. EPA Region 8, Mail Code 8ENF-UFO 999 18th Street, Suite 300 Denver, Colorado 80202-2466

The Director has determined that the maximum allowable surface injection pressure (MAIP) for the Ute Tribal 16-07 is 1658 psig. Please be reminded that it is the responsibility of the owner/operator to be aware of, and to comply with, all conditions of Authorization for Additional Well UT20736-06603 and EPA UIC Area Permit UT20736-00000 and relevant modifications as issued.

If you have any questions regarding this Authorization, please call Patricia Pfeiffer of my staff at (303) 312-6271. For questions regarding notification, testing, monitoring, reporting or other Permit requirements, the UIC Technical Enforcement Program may be reached by calling (800) 227-8917.

Sincerely,

Tracy M. Eagle

Director

Ground Water Program

cc: Maxine Natchees, Acting Chairperson Uintah & Ouray Business Committee Ute Indian Tribe P.O. Box 190 Fort Duchesne, UT 84026

> Chester Mills, Superintendent BIA - Uintah & Ouray Indian Agency P.O. Box 130 Fort Duchesne, UT 84026

Mr. Kenneth Smith
Executive Vice President and Chief Operating Officer
Petroglyph Energy, Inc.
555 S. Cole Blvd
Boise, ID 83709

S. Elaine Willie Environmental Coordinator Ute Indian Tribe P.O. Box 460 Fort Duchesne, UT 84026

Gil Hunt Technical Services Manager Utah Division of Oil, Gas, and Mining 1594 West North Temple - Suite 1220 Salt Lake City, UT 84114-5801

BLM - Vernal District 170 South 500 East Vernal, UT 84078



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8
999 18TH STREET - SUITE 300
DENVER, CO 80202-2466

Phone 800-227-8917 http://www.epa.gov/region08

FEB 1 6 2006

Ref: 8P-W-GW

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY

Steve Wall, District Manager Petroglyph Energy, Inc. 4116 West 3000 So. Ioka Lane Roosevelt, UT 84066

43.013.31854

RE:

Additional Well to Antelope Creek Area Permit

UIC Permit No. UT20736-00000

Well ID: UT20736-06603

Ute Tribal No.16-07, Duchesne County, Utah

Dear Mr. Wall:

I am writing this letter to provide you with a copy of the revised page 3 of 6 in your Authorization for Additional Well and UIC Area Permit UT20736-00000, for the Ute Tribal 16-07 well. Please replace the page with the enclosed corrected page, which clarifies the frequency of testing requirement for Part II (External) Mechanical Integrity. Please note that demonstration of Part II (External) Mechanical Integrity is required within 180 days after commencing injection and at least once every five years thereafter.

If you have any questions regarding this Authorization, please call Patricia Pfeiffer of my staff at (303) 312-6271. For questions regarding notification, testing, monitoring, reporting or other Permit requirements, the UIC Technical Enforcement Program may be reached by calling (800) 227-8917, extension 6211.

Sincerely,

RECEIVED

FEB 2 1 2006

Tracy M. Eagle

Director

Ground Water Program

DIV. OF OIL, GAS & MINING

cc: Maxine Natchees, Chairperson
Uintah & Ouray Business Committee
Ute Indian Tribe
P.O. Box 190
Fort Duchesne, UT 84026

Chester Mills, Superintendent
BIA - Uintah & Ouray Indian Agency
P.O. Box 130
Fort Duchesne, UT 84026

Mr. Kenneth Smith Company Comp

Elaine Willie Environmental Coordinator Ute Indian Tribe P.O. Box 460 Fort Duchesne, UT 84026

Gil Hunt Technical Services Manager Utah Division of Oil, Gas, and Mining 1594 West North Temple - Suite 1220 Salt Lake City, UT 84114-5801

Kirk Fleetwood, PE BLM - Vernal District 170 South 500 East Vernal, UT 84078 <u>Demonstration of Mechanical Integrity</u>: A successful demonstration of Part I (Internal) Mechanical Integrity using a standard Casing-Tubing pressure test is required prior to injection and at least once every five years thereafter. EPA reviewed the cement bond log and determined the cement may not provide an effective barrier to significant upward movement of fluids through vertical channels adjacent to the well bore pursuant to 40 CFR 146.8 (a)(2). Therefore, further demonstration of Part II (External) Mechanical Integrity is required within 180 days after commencing injection and at least once every five years thereafter.

<u>Demonstration of Financial Responsibility:</u> The applicant has demonstrated financial responsibility via a Surety Bond that has been reviewed and approved by the EPA.

Plugging and Abandonment: The well shall be plugged in a manner that isolates the injection zone and prevents movement of fluids into or between USDWs. Tubing, packers, and any downhole apparatus shall be removed. Class A, C, G, and H cements, with additives such as accelerators and retarders that control or enhance cement properties, may be used for plugs; however, volume extending additives and gel cements are not approved for plug use. Plug placement shall be verified by tagging. Plugging gel of at least 9.2 lb/gal shall be placed between all plugs. A minimum 50 ft surface plug shall be set inside and outside of the surface casing to seal pathways for fluid migration into the subsurface. Within sixty (60) days after plugging the owner or operator shall submit Plugging Record (EPA Form 7520-13) to the Director. The Plugging Record must be certified as accurate and complete by the person responsible for the plugging operation. At a minimum, the following plugs are required:

- PLUG NO. 1: Set a cast iron bridge plug (CIBP) no more than 50 ft above the top perforation at 4528 ft with a minimum 20 ft cement plug on top of the CIBP.
- PLUG NO. 2: Set a minimum 210 ft cement plug inside of the 5-1/2" casing across the Trona Zone and the Mahogany Shale, between approximately 2840 ft to 3050 ft.
- PLUG NO. 3: Set a minimum 200 ft cement plug inside of the 5-1/2" casing across the Green River, between approximately 1568 ft to 1768 ft.
- PLUG NO. 4: Set a minimum 200 ft cement plug on the backside of the 5-1/2" casing, across the Green River, between approximately 1568 ft to 1768 ft.
- PLUG NO. 5: Set a minimum 50 ft cement plug on the backside of the 5-1/2" casing, across the surface casing shoe at 270 ft (unless pre-existing backside cement precludes cement-squeezing this interval.)
- PLUG NO. 6: Set a cement plug inside of the 5-1/2" casing, from at least 295 ft to 245 ft.
- PLUG NO. 7: Set a cement plug on the backside of the 5-1/2" casing, from surface to a depth of at least 50 ft.
- PLUG NO. 8: Set a cement plug inside of the 5-1/2" casing from surface to a depth of at least 50 ft.